

nist CHRONICLE

Volume XXVIII, ISSUE NO.2 AUGUST 2023



ARTIFICIAL INTELLIGENCE

Siddhartha is an 11 years old boy. He weighs 27 kg.

He is 4 feet 6 inches. He has black hair.

His Love is Real but he is not Real

Cover Art Inspired by Steven Spielberg's Sci-Fi Masterpiece: A.I. Artificial Intelligence

SANKLAP 2023



CONTENTS

MESSAGE CORNER

03

- Founder Chairman
- Vice Principal
- Advisor (NIST Chronicle)

LETTER FROM EDITORS

07

- Board of Editors
- Letter from Chief Editor

FEATURE STORY

08

Artificial Intelligence: A Reality Check

Interview:

- A conversation with Yuval Noah Harari by Nicholas Thompson, CEO at The Atlantic
- An Interview with Prof. Brojo Kishore Mishra, HOD, CSE, NIST

SANKALP: EVENT FOR EVERYONE

15

NEW FACES OF NIST FAMILY

19

- Dr. Amit Patnaik
- Dr. Puspanjali Jena
- Dr. Kali Prasad Rath
- Dr. Deepak Kumar Swain
- Dr. Manoj Kumar Pradhan
- Mr. Amaresh Kumar Mohanty
- Dr. Runu Sahu
- Ms. Kshirabdhi Tanaya Nayak
- Mr. N. Toyaad Kumar Reddy
- Mr. Khirod Kumar Sahu
- Ms. Pragnya Kumari Pradhan
- Ms. Shubhasri Pradhan
- Mr. Abhimanya Nayak

LIST OF PH.D SCHOLARS

21

INNOVATION & RESEARCH FRONTIER

22

1. Patent Publication
2. Journal Publication
3. Conference
4. Book Chapter
5. Workshop Attended
6. Ph.D Supervised
7. Ph.D Awarded

WORKSHOP, SEMINAR & TALK

25

- Illuminating the Path to the Future: Prof. A.K Ganguli's Nanotechnology Session at NIST
- Innovation & Entrepreneurship: Transforming Higher Education Institutions
- Unravelling the Essence of Intellectual Property Rights

- Prof. Vishvas Chavan Explores 'The Greatness of Fundamentals of Science
- NIST Partners with EduCare Taiwan: Enhancing Opportunities for Students
- IoT Revolution: Compressive Sensing Insights by Prof. Samrat L. Sabat
- Innovative Prototyping & Funding: Workshop at NIST
- Prof. Kanhu Charan Patra's Inspirational Talk
- A talk on South Odisha's Cultural Heritage

GUEST INTERVIEW:

27

Mr. Ajay Kumar Mohanty
Founder of A4ConServ

SCIENCE/ENGINEERING/MANAGEMENT

28

1. Quiet Quitting: The Perils of Silence

EVENTS & CLUB ACTIVITIES

30

- Spreading Smiles through the "Joy of Giving"
- GIT and GITHUB Workshop
- NIST's Anti-Ragging Campaign Awareness
- NMS Won SONIC SHOWDOWN
- NIST Berhampur Celebrates Van Mahotsav
- Club REC's Induction Program
- NSS Illuminate the Path to Healthy Vision
- World Environment Day
- International Yoga Day
- NIST hosted IDEATHON 1.0
- Independence Day Celebration at NIST
- Team NCS Hosted Drishyam
- Extravaganza Bash
- Connect to Escape 3.0

HELPING BAHANAGA RAILWAY ACCIDENT VICTIMS

33

NIST offers Free Education to Children of the affected families

STUDENT SUCCESS STORY

34

- Prestigious Summer Internship at AERB
- A path from NIST to esteemed IISC
- Rohit Raj Padhi and S Sovan Kumar's Journey to Excellence at NTHU Taiwan

ART, PHOTOGRAPHY & LITERATURE

35

ALUMNI SPEAK

37

- Mrs. Rashmirekha Kalyani Mishra
B. Tech, Electronics & Communication Engineering
Batch: 2010-2014

NIST IN NEWS

39

MESSAGE FROM THE FOUNDER CHAIRMAN



My sincere thanks to the team members of NIST Chronicle for regularly publishing the e-news with the latest happenings at NIST and focusing on key articles relevant to the academic community, research, innovation and society. It is a great pleasure to know that, this issue of NIST Chronicle is focused on the featured article on "Artificial Intelligence: A Reality Check".

As a research institute, we at NIST always focus on the future, so far as research and innovation are concerned. Beyond academics and research labs, there are multiple Centers of Research Excellence (CRE) at NIST for collaborative research across multiple disciplines/domains. Some of the areas where we are focused on: 5G and Future Communication, Smart Fabrication, Multimedia and X-Reality, Computer Vision, Internet of Things (IoT), Robotics for Industry 4.0, Renewable Energy, Artificial Intelligence (AI) and Machine Learning (ML) etc. AI/ML area has made tremendous progress in the past decade and it has had far-reaching impact in different domains starting from retail stores, sales and marketing, supply chain, banking, medical science, manufacturing, and warfare to space technology.

Almost every day, there are many news, articles and discussions on Artificial Intelligence (AI). Technocrats and visionaries like Ray Kurzweil and Elon Musk put humanity on alert with the prediction that machine intelligence will be taking over human intelligence. You may have heard about singularity, where it is predicted that a computer can emulate not only a single human brain but many. The book "The Myth of Artificial Intelligence: Why Computers Can't Think the Way We Do" by Eric Larson explains how AI research has evolved from a simplified view of intelligence.

Dr. Sukant K. Mohapatra

Tremendous computing power and its evolution (e.g. quantum computing) have helped to make the great leap in the field of AI. The advances in autonomous driving, predictive analysis and prescriptive inference/intelligence, location-based marketing/service and inferences are great examples of the use of AI. In future, it is expected that war could be fought with AI-driven robots without any human beings.

It is important to realize that, as of now AI is enabled to perform specific tasks within a set of defined parameters and still far away from true human intelligence. Neural networks are a good model to emulate the learning process but they are not yet human brains. Though it does not behave fully like a human brain, it is widely used to solve a wide range of problems. It is for sure, that as AI/ML continues to evolve, we will see more powerful and capable systems and applications which could be pretty disruptive. The term Artificial General Intelligence (AGI) when AI-driven machines can truly think and act like humans is years away from becoming a reality. Futuristic believe there exist a narrow gap between AI and general intelligence that human possesses.

My sincere thanks to the NIST fraternity including faculty, staff, student and alumni community for achieving wonderful accomplishments at NIST over the years. We have made tremendous progress so far, but we have miles to go, as our quest for excellence will never stop; our rich heritage and legacy will only continue and grow further.

I congratulate the entire editorial team for their hard work, diligence and dedication to bringing out this edition of the NIST Chronicle

MESSAGE FROM THE VICE PRINCIPAL



It gives me immense pleasure to announce the upcoming release of the latest edition of our NIST e-publication. This endeavor is a testament to the relentless pursuit of knowledge and the unwavering commitment to excellence that defines our institution. In each issue, we aim to showcase the remarkable work of our dedicated scholars and researchers. The diverse range of articles, research papers, and insightful perspectives within these pages reflect the collective brilliance and ingenuity of the NIST community.

I extend my heartfelt gratitude to every contributor, editor, and supporter who has poured their time, energy, and expertise into this endeavour. Your contributions have not only enriched the publication but have also strengthened the foundation of our institution.

Dr. Bishnukar Nayak

As we delve into the pages of this upcoming issue, let us approach it with open minds and hearts, ready to absorb the wisdom, creativity, and innovative spirit that it encapsulates. May it serve as a source of inspiration for all of us, encouraging us to reach greater heights in our respective fields. Let us continue to uphold the values of curiosity, perseverance, and a relentless pursuit of knowledge that define NIST. Together, we shall forge new paths, break barriers, and leave an indelible mark on the world of education, including engineering, science, and management.

Thank you for your continued dedication and passion for the betterment of our institution. I am confident that the forthcoming issue will be a testament to the outstanding work that NIST stands for.



MESSAGE FROM THE ADVISOR



Evolution: ascent with the change of Nature's many varied systems, has become a powerful unifying concept throughout the sciences. Evolution is an eternal truth. Whether it is the "Big Bang Theory of the West" or the "Vedic Rashmi Theory" of the Vedic Astronomy of the East, every research study confirms it. The fact is that everything evolves to dissolve- from nature to living organism, from Technology to Society evolution dissolves to give way to new evolution.

A cursory glance through the various phases of the "Industrial Revolution" also establishes how products, markets, sectors, industries, and technologies have evolved and dissolved with the passage of time.

We are now in the age of Aquarius. This is a time of continuous change and evolution. The current issue of NIST e-chronicle has also evolved over many years. From being a silent spokesperson of our activities, the chronicle is today enriched with an array of features

ranging from the latest technology trends of AI and Machine learning to the necessity of renewable energy for our survival and many more. I greatly compliment the entire editorial team of the NIST Chronicle for bringing those elements of growth and change making it more relevant, trendy and progressive. The microcosm is the manifestation of the Macrocosm. In fact, the human soul is a microcosmic manifestation of the macrocosmic realm. As the Macro World embraces growth and changes, we must also exhibit compatibility with these changes. Human life is an evolving journey. Our greatest human adventure is the evolution of human consciousness. We need to enlarge the soul, liberate the spirit and light up the brain. If we fail to do so, we ourselves will be servants to our own invention.

I urge our stakeholders, Faculty, Students, staff, Alumni and every esteemed reader of this NIST chronicle to share their valuable feedback with us.

Happy Reading!!!

Dr. Sabyasachi Rath



LETTER FROM CHIEF EDITOR

Artificial Intelligence: A Reality Check

In the grand hierarchy of the animal kingdom, homo-sapiens have firmly established themselves at the top, not owing to size or physical prowess like blue whales or lions, but it is due to our unparalleled intelligence. Despite lacking the sheer magnitude of a blue whale, the raw strength of a lion, or the speed of a leopard, we harness our cognitive competence to tame these majestic creatures. For millennia, we have persistently delved into the mysterious workings of our own minds, striving to decode the complicated processes of perception, comprehension, prediction, and manipulation. The sphere of artificial intelligence (AI) extends our quest beyond mere understanding; it challenges us to construct intelligent entities with the power to think, learn, and adapt. AI emerged on the world stage in the aftermath of World War II, with its very name coined in 1956- A machine with a mind, capable of perceiving, reasoning, and taking action. In an era marked by remarkable technological advancements, few innovations have captured the imagination quite like AI. From science fiction, and fantasies to practical applications in everyday life, AI has woven itself into the fabric of modern society. In between both fear and hope, we need to take a closer look at the good and bad sides of AI. AI has made significant development, revolutionized industries and augmented human capabilities. From autonomous vehicles navigating complex terrains to medical diagnoses powered by machine learning algorithms, the potential is undeniable. But as we gaze into the realm of AI, it becomes increasingly clear that, a measured standpoint is essential now.

We should recognize that AI and human intelligence have a complex connection. While AI systems can process vast amounts of data and perform complex calculations, they lack the delicate understanding and emotional intelligence that define human thinking. The ability to crack context, recognize satire, and empathize with others remains a domain exclusive to human cognition. The combination of AI's computational competence with its limitations is a reality that deserves consideration. Ethics and accountability are vital aspects that necessitate a reality check. AI systems learn from the data they are fed, which means that biases present in that data can be perpetuated or amplified. This poses ethical challenges in sectors like criminal justice, where biased data could lead to unjust outcomes. Ensuring that AI systems are unbiased, transparent, and accountable requires vigilance and stringent regulations. The societal impact of AI-driven automation also demands scrutiny. While AI can optimize efficiency and streamline processes, it can also lead to job displacement and economic inequality. A reality check reveals the need for re-skilling and up-skilling initiatives that empower individuals to thrive in a changing job landscape. Furthermore, the rise of AI prompts questions about data privacy and security. The extensive data collection required to fuel AI algorithms raises concerns about how personal information is handled, stored, and potentially misused. Striking a balance between innovations and safeguarding individual rights is a challenge that can't be overlooked.

In the territory of creativity, AI's role sparks. While AI-generated art, music, and literature offer exciting possibilities, the authenticity of human creativity may not be replicated by algorithms. The profound connection between an artist's emotions and their work is an intangible essence that AI lacks. We need to think about the ethical questions that arise as we create AI systems that can make decisions on their own. As AI advances, discussions about the moral issues of building such machines become increasingly important. The idea that, AI might become smarter than humans brings up a lot of uncertainty and calls for ethical thinking. In conclusion, while the future holds remarkable potential for AI, it's crucial to confront the complex realities it presents. This involves navigating ethical considerations, addressing biases, fostering transparency, and nurturing the symbiotic relationship between human and artificial intelligence. As we have to pursue the path of innovation, let us do so with a clear-eyed perspective, recognizing both the transformative possibilities and the challenges that AI bestows upon us. Only through a balanced understanding, we can ensure that AI remains a tool that enhances our lives without overshadowing the essence of our humanity.

Advisor:

- Dr. Sabyasachi Rath

Chief Editor:

- Dr. Ratikanta Nayak

Board of Editors:

- Dr. Basant Kumar Sahu
- Dr. Amarnath Padhi
- Ms. Pragnya P. Samanta
- Mr. Abhisikta Mishra
- Mr. Pitambar Sahu

✉ epublication@nist.edu

☎ 7205326478/ 7205336478

☎ 9777146478

in @TheNISTian

🐦 @TheNISTian

f @NISTBrahmapur

📷 @TheNISTian

▶ @TheNISTian

📌 @TheNISTian

📍 Address:

NIST (Autonomous)
Institute Park, Pallur Hills,
Berhampur, Odisha, India.
Pin:761008
Email: info@nist.edu



FEATURE STORY

Artificial Intelligence A Reality Check

In our digital world, technology is advancing quickly. Artificial Intelligence (AI) is one such technology that's changing how we do things. It helps with self-driving cars and virtual assistants, making tasks easier and giving us new ideas. But it's important to look beyond the excitement and think about its limits and ethical challenges. We need to be realistic and careful as AI becomes a big part of our lives.

The Dawn of Possibilities:

AI has come a long way, moving from stories to real life, and it's amazing. Machines can now do things like humans, like learning and problem-solving. This has led to many uses in different areas. In healthcare, AI helps detect diseases early by analyzing medical images accurately.

In finance, AI predicts market trends, and in manufacturing, robots make production faster. AI is even used to create art and music, showing the mix of human creativity and machine abilities.

The Realities Beneath the Surface:

Despite its amazing abilities, it's important to understand AI clearly. AI can do complex calculations quickly, but it doesn't have human-like feelings or understanding. It's good at recognizing patterns and probabilities, but it struggles with empathy and understanding emotions, which are vital in human interactions. This shows that AI is a tool, not a substitute, for the many aspects of human intelligence.

Understanding Ethical Challenges in AI:

Ethical issues are important in AI. AI learns from data, but if the data is biased, AI can make biased decisions. For example, in criminal justice, biased data can make unfair predictions. We need transparency, fairness, and accountability in AI. Rules about how AI is made and used are really important to make sure it's fair.

The Challenge of Work and Creativity:

AI's promise of automation and optimization raises questions about the future of work. While AI can revolutionize industries, there are concerns about job displacement and economic inequality. A reality check calls for proactive measures such as reskilling and upskilling initiatives to empower workers for the evolving landscape. Balancing AI's potential for efficiency with the well-being of the workforce is a tightrope that requires careful navigation.



Privacy in the Digital Age:

AI thrives on data, and the collection of copious amounts of personal information fuels its growth. This reality thrusts data privacy and security into the spotlight. Striking a balance between utilizing data for innovation while safeguarding individual privacy poses a challenge that societies worldwide grapple with. The intersection of AI and privacy necessitates a thoughtful dialogue that keeps human rights at the forefront.

Looking to the Horizon:

AI makes us think about machines becoming as smart as humans, a concept called "singularity." This idea brings up big questions about what it means to be human and how we fit in with really smart machines. It also makes us think about the ethics of creating machines that could be smarter than us.

In conclusion, the world of Artificial Intelligence is not a monolith of endless possibilities, but a multifaceted landscape riddled with complexities, challenges, and dilemmas. As we stride forward, it's imperative to embrace AI with eyes wide open, acknowledging its immense potential while grappling with the intricate realities that lie beneath the surface. A thoughtful and pragmatic approach will ensure that AI enhances our lives without overshadowing the very essence of what it means to be human.

The evolution of human civilization began with rudimentary tools like sharpened stones, initially designed for self-defence and sustenance. Progressing through time, fire was harnessed, script and language were developed for communication, and complex institutions like religion, economy, armies, and empires emerged. Technological advancements introduced innovations like steam engines, boats, railroads, and machine guns, driving colonial expansion. However, each step was guided by human intellect, determining the when, where, and how of implementation.

Intriguingly, the tide is shifting as machines acquire language, intelligence, and the capacity for evolution and self-improvement, paralleling human attributes.

FEATURE STORY

The spectra of "TERMINATOR" inches towards reality. The catalyst behind this transformative paradigm is AI (Artificial Intelligence). The pivotal question looms: Is AI a boon or a bane for humanity?

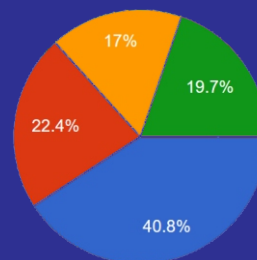
Divergent viewpoints abound on AI's implications. Sam Altman, founder of CHATGPT, holds an optimistic outlook, seeing promise in this emerging technology. Visionaries like Elon Musk and historian Prof. Noah A. Harari, however, advocate for immediate governmental intervention, urging the formulation of regulatory frameworks to prevent undue dominance of AI before it gains mastery.

In this context, NIST Chronicle sought to understand our students' thoughts on AI by asking, 'What do you think about the future of AI?' and provided four options for their response.

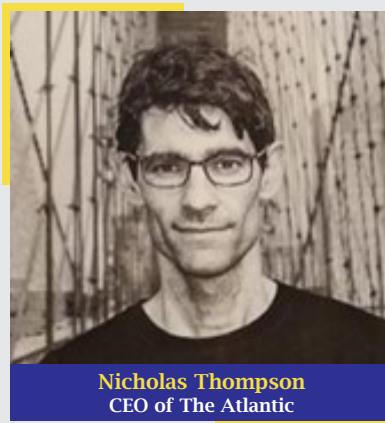
1. An innovative technology deserving of admiration.
2. A potential threat to Job
3. Advocating governmental control over AI to prevent the rise of Artificial Super Intelligence
4. Harnessing Artificial Super Intelligence can tackle climate change and pioneer breakthroughs in disease treatments

How do you interpret Artificial Intelligence?

- An innovative technology deserving of admiration.
- Advocating governmental control over AI to prevent the rise of Artificial Super Intelligence
- A potential threat to job
- Harnessing Artificial Super Intelligence can tackle climate change and pioneer breakthroughs in disease treatments



In this context, NIST CHRONICLE offered diverse perspectives on AI by conducting two expert interviews, revealing a multifaceted view of the subject."



Nicholas Thompson
CEO of The Atlantic

Nicholas Thompson is the CEO of The Atlantic, a prominent American magazine and media organization. Born in 1975, Thompson is known for his extensive experience in journalism and technology. Before leading The Atlantic, he served as the editor-in-chief of Wired magazine, where he contributed to discussions on technology, culture, and society.

Thompson's leadership at The Atlantic aimed to guide the publication in the digital age and maintain its reputation for high-quality journalism. Under his tenure, The Atlantic continued to produce thought-provoking content on a wide range of topics, including politics, culture, and science

Yuval Noah Harari is an Israeli historian and writer renowned for his captivating exploration of history, technology, and the future of humanity. Born on February 24, 1976, in Haifa, Israel, he is a professor at the Hebrew University of Jerusalem. Harari gained global recognition for his best-selling books, including "Sapiens: A Brief History of Humankind," "Homo Deus: A Brief History of Tomorrow," and "21 Lessons for the 21st Century." His works offer thought-provoking insights into the evolution of humans, the impact of technology, and the challenges facing society in the modern age. Harari's ability to distil complex ideas into accessible narratives has made him a prominent figure in the field of popular science writing and a sought-after speaker on global stages.



Yuval Noah Harari
An Israeli historian and writer

FEATURE STORY

He just had the honor of interviewing the great scholar Yuval Noah Harari at the "AI for Good" conference put on by the UN in Geneva. They spoke about the risks to the democracy of generative AI and some of the potential frameworks for maximizing the potential benefits and minimizing potential harm.

Nick Thompson (NT): It is a great pleasure to interview you. It is a moment of extreme change on the subject about which you know a lot. So, my first question for you: a lot has happened in AI in the last six months. You have complained about AI for years. You've been warning about the risks to democracy by AI for years. What has changed, in your critique or your concern as you've watched large language models and generative AI explode in the last few months?

Yuval Noah Harari (YNH): I think things are happening just much faster than we expected, even people in the field. I think everybody should really know just three things about AI. You know you hear so much about AI but you really need to know three things.

First of all, this is the first tool in human history that can make decisions by itself. It's nothing like any previous invention in history. Atom bombs could not make decisions, they couldn't decide who to bomb. AI can make decisions by itself.

The second thing everybody needs to know is that this is the first tool in human history that can create new ideas by itself. Now printing presses or radio, they couldn't create ideas. They could disseminate all our ideas, but AI can create completely new ideas.

The third thing everybody should know is that humans are not very good at using new tools, or new technologies. We often make mistakes. It takes time to learn how to use new tools in a beneficial and wise way.

You know if you look at the industrial revolution, which many people compare the current AI revolution to the industrial revolution, this is quite a pessimistic comparison because when humans learned how to use the tools of the industrial revolution, we made some terrible mistakes on the way. Imperialism, Nazism, communism, the two World Wars, they were all mistakes on the way to learning how to use the tools of the industrial revolution. If we make similar mistakes with AI, this could really be the end of our species.

And the last thing is that while we are learning to use AI, it is learning to use us. So we have even less time and less margin for error than with any previous invention.

NT: I want to spend most of this conversation talking about how to regulate AI, to set the course, to reduce the risks, the policies that very smart folks watching this should be thinking about. But let's go back to that point that this is in some ways you're saying the most dangerous technology ever created. Right now, AI can't give a biography of Yuval Harari. Right? If I go into Open AI and type in to give me a bio, it will get things wrong. It makes all kinds of mistakes. It's not actually that good yet. How long will it take to develop from this kind of adolescent confused messed-up chatbot into the death destroyer of worlds that we see in the worst case?

YNH: I don't think it really will develop into the kind of destroyer world of worlds. The dangers of AI don't necessarily come from this super intelligent machine that can

predict and do everything. It can come also from primitive AI which we already have. If we think about social media for instance, and the way that it's eroded our public trust, that it eroded democratic institutions all over the world. This was done with very very primitive AI. Basically, in social media, you have these algorithms that try to maximize user engagement, and the algorithms discovered, largely by trial and error, that the easiest way to increase user engagement, to grab people's attention, is by spreading outrage. This is something AI discovered about human nature, and it used it, it has destroyed trust and institutions and public conversations in many countries. We now have a gloomy situation where we have the most sophisticated information technology in history and people can no longer agree on anything. People can no longer have a meaningful conversation. And this is with very primitive AI.

So we don't need to wait for this science fiction or all-powerful AI to be worried. Now of course AI can also be used for the good. It's the most dangerous technology we've ever created, and it is also potentially the most beneficial technology that we ever created. So it's not about completely banning it which is in any way impossible, it's about regulating it to make sure that it is used for good and not for ill. Now how long, how much time do we have? It's very difficult to say. You know 10 years ago, there was no AI. People were talking about it, but it was still, for most people, it was science fiction. The whole AI revolution is just less than 10 years old. It's just making its first baby

FEATURE STORY

steps, but it is progressing at such a fast pace that nobody has any idea where we will be in say 10 years.

NT: All right. Well actually, I would just like to say, that you said it's impossible to have a good sophisticated conversation, Yuval. I feel like we're having one right now, but I do get your point. So let's talk about the pace of change because that is clearly underpinning so much of the concerns. If the changes that had happened over the last six months had happened over five years, we would have a much better chance of figuring out the norms. If the changes in the Facebook algorithm had happened over a period of many years, we could have figured out the norms, right?

So is there anything that can be done to change the speed at which this is evolving? I know you signed a letter saying to stop the development of AI if you're going to build a large language model larger than GPT-4. That didn't have an effect, as far as I know, or at least it didn't change Open AI's behaviour or Microsoft's behaviour. What needs to happen to change the speed at which this is going?

YNH: I think we need to differentiate between development and deployment. It's very difficult to stop the development because we have this arms race mentality. People are aware of some of the dangers but they don't want to be left behind. But the really crucial thing, and this is the good news, the crucial thing is to slow down deployment not development. You can have an extremely sophisticated AI tool in your laboratory as long as you don't deploy it out into the public sphere. This is less dangerous. It's like you have this very dangerous virus in your laboratory, but you don't

release it to the public sphere. That's fine. There is a margin of safety there. The same way that it is, you know unthinkable; forget about viruses, I mean drug companies that developed a powerful new medicine, they can't start just selling it to the public without going through some safety checks. And if you develop a new car you can't just put it on the road without first going through safety checks. It should be the same with AI. We should better understand its potential impact on society, on culture, on psychology, on the economy of the world before we deploy it into the public sphere.

NT: But be a little more specific. So I developed a large language model. It's better than GPT-4. I would like to compete. I need to pay my developers, my venture capitalists. They want a return. I've got this software; it's going to help doctors all over the world. In fact, doctors in Africa are going to be able to cure people. What regulatory authority do I need to go to? And I don't even understand how this thing works. The people who made AI aren't quite sure why it works this way. What government authority is going to look at it and be able to say, you know, that's safe?

YNH: That's a very big issue. I mean we don't have the regulatory bodies in place. This is what we need to establish as soon as possible. You know you can have a regulation, for instance, that says you need to devote, say, I don't know, 20% of any investment in AI to safety and regulation. We don't have the institutions to regulate AI because we haven't invested in them and because if you now finish a PhD in computer science and you specialize in AI and the government offers you one salary to come to the, I don't know, legal department

and the private industry offers you 10 times or a hundred times more to go to them, then it's quite obvious where most people would go. So we need to invest a lot more in safety and in regulation, and we can do it—again, a simple, simple in conceptual terms, a simple first step is simply to have a regulation that there is a fixed amount, a fixed percentage, of every investment in AI, must go to safety.

NT: So you're saying that if I have my, again, my large language model, I've built it with my hired team of developers. Do I have to put one in five of them on safety? And report to some authority that I've done that?

YNH: The same way that when you develop a car, you have some people working on making the car good as fast as possible, but you have people working on safety. Because you know, even if you have no ethics of your own, you know that no government will allow your car on the road unless it's safe.

NT: So one of the concerns I have about the big companies coming and asking to be regulated—we've seen Sam Altman has been travelling the world and Brad Smith from Microsoft in Washington—one of the concerns I have, is that their desire to be regulated may come from moral concerns and may come from the fact that if they are heavily regulated, no one will be able to compete with them.

If the government says, you know what, in order to have an AI company, gotta have 20 of your people on safety, you have to get certified, you need an off switch, you get a lawyer who's going to comply with the regulations in Denmark and make sure that it all matches up with the regulations of the United States, only the big

FEATURE STORY

companies can do that. And then their power increases. GDPR only increased the power of the big social media companies. Are we going to do that again?

YNH: That's a very good question. I'm not sure about the answer, but first of all, at present, the kind of resources you need in money, data, in people to develop the really powerful models is such that it is a game of very few competitors. Certainly, if you think in global terms, then very few countries are leading this AI revolution. Talking at the UN with representatives throughout the world, is extremely dangerous. Again, the previous time something like this happened in the 19th century with the Industrial Revolution, we had a few countries leading the Industrial Revolution and then very quickly, coming in and exploiting the rest of the world. And this can happen again with AI in new ways.

With the AI revolution, you don't need to send soldiers into a country in order to basically conquer it. You just need to take the data out. You can control it from a far. So when we talk about regulation, it's not just the issue of a national government with its corporations. It's also a global issue of how all these countries that don't have—they are not really competitors in the AI race—how are they going to face the consequences? Because obviously, the technology will impact everyone, not just the front ones.

NT: Can you relax the regulations slightly since I created a whole bunch of fakes along with my 12 year old recently while playing with some software. It's the same sell, and I really loved the little guy.

YNH: It's not that you're not allowed to create them. You are not

allowed to pass them in public as real people. I mean, there are situations when it would be wonderful to interact with an AI, let's say an AI doctor. It can be extremely helpful to interact with an AI doctor provided it's very clear that this is not a human doctor, this is an AI doctor. When I interact with an AI doctor or journalist or whatever, I need to know whether it's a real human being or an AI.

NT: Let's say it's a customer service rep. What if you lost your luggage, and it's just, you're calling United Airlines you need your bag back. Do you care?

YNH: I need to know if it's a real human or not. I mean if they have a tune, it's a two-second announcement, you're about to be connected to an AI bot, and now I have the conversation and it provides what I need, I have no problem with it.

NT: Let me ask you, we're running very short on time, but let me ask you one last impossible to answer a big question, though you answer everything very well. I love talking with you, Yuval. One of the arguments made for why the west and democracy should go quickly on AI is that we're essentially in a geopolitical arms race and if the democracies—they're trying to make sure everybody's real, you have government commissions, you have to certify 20% of your time is being spent on the safety stuff, and then North Korea says you know what? Let's go, right? Or more likely, China says, let's go. Then AI develops in a totally different way, and in fact, the AI bots and the AI systems built in non-democratic countries become massively more powerful, and it shifts the power of the world. Do you worry about that?

YNH: So many things to say about that. First of all-

NT: Two minutes left, Yuval!

YNH: Okay first of all, I'm not talking about stopping development but deployment. Now if we don't regulate deployment, this will definitely destroy democracy much faster than any scheme by a North Korean tyrant or whatever. We need regulation in order to save democracy.

If we don't have regulation, we will destroy ourselves. And also, take into account that dictatorships are also terrified by the new AI, by the new large language models in particular, because dictatorships, rely on fear in order to manage the information system.

You tell a joke about the leader or you tell something that the regime doesn't want to hear you, you go away. Now how do you frighten an AI? What will you say to the AI? If you tell this joke if you could go on telling jokes about our leader, or if you expose this thing from our past that nobody is supposed to know, you will go to the AI, they have no idea how to stop the AI from stealing the beans. They can prevent the AI from access, but that's going to be very difficult and that will cause them to lag behind. Actually, in this particular situation, democracy, because they; I mean they are threatened, but they have a larger knowledge for that.

They are better able to survive with a certain amount of pollution in their information system. For dictatorships, it's much much harder because they tend to rely on zero opposition voices in their information network, and how do you stop an AI from voicing the problematic ideas? Nobody knows that.

FEATURE STORY

A CONVERSATION WITH PROF. BROJO KISHORE MISHRA (HOD, CSE NIST) ON ARTIFICIAL INTELLIGENCE - A REALITY CHECK

Dr. Brojo Kishore Mishra is a distinguished Professor and the Head of the School of Computer Science and Engineering at NIST Institute of Science and Technology (Autonomous), located in Berhampur, Odisha, India. He holds a PhD in Computer Science from Berhampur University, awarded in 2012. With an avid interest in Artificial Intelligence (AI), he has guided two PhD research scholars in this domain. Dr. Mishra is an active member of professional organizations, including IEEE, where he is a recognized member. He is also a Life Member of the Computer Society of India (CSI) and the Indian Society for Technical Education (ISTE). Dr. Mishra has made significant contributions to the field, authoring three books, six book chapters, six journal articles, and four conference proceedings. Additionally, he has served as the CSI State Student Coordinator for Odisha (2015-16) and played a vital role as a Jury Coordination Committee Member and Mentor for the "All IEEE Young Engineers' Humanitarian Challenge (AIYEHUM 2015) project competition, organized by IEEE Region 10 (Asia-Pacific). He continues to share his expertise by teaching AI at both undergraduate and postgraduate levels.



Prof. Brojo Kishore Mishra
HoD, School of Computer Sc & Engg, NIST

NIST Chronicle (NC): Can you provide a brief overview of your background and experience in the field of artificial intelligence?

Prof. B. K. Mishra (BKM): Artificial Intelligence has been my primary research focus. I've had the privilege of guiding two PhD research scholars in this field. My contributions include the publication of several books, numerous book chapters, journal articles, and conference proceedings, all centred around AI. Additionally, I've had the opportunity to teach this subject at both undergraduate and postgraduate levels on multiple occasions.

NC: AI has made significant advancements in recent years. What do you consider to be the most exciting developments or breakthroughs in AI technology?

BKM: Some of the recent developments in AI are explainable AI (XAI), GPT-3 and Transformers, Robotics Advancements, Computer Vision Advancements, Reinforcement Learning, AI in Healthcare, Ethical AI and Bias Mitigation, AI in Autonomous Systems, Quantum Computing and AI, AI in Natural Language Generation, AI in Climate Science, etc.

NC: Explain the concept of machine learning and its importance in AI. How does it work, and what are some practical applications?

BKM: Machine learning is a branch of artificial intelligence where computers learn to make decisions and predictions from data. Instead of being explicitly programmed, these systems use algorithms to identify patterns and learn from examples. It involves training computer algorithms to recognize patterns in data. These algorithms learn from examples, allowing them to make predictions or decisions without being explicitly programmed. The process includes collecting and preparing data, choosing a suitable algorithm, training the model on the data, evaluating its performance, and deploying it for predictions. As the model encounters more data, it refines its predictions, continuously improving its accuracy and usefulness in various applications, such as:

- Agriculture for Precision Agriculture and Livestock Monitoring
- Environmental Monitoring for Climate Modeling and Wildlife Conservation
- Healthcare for Disease Diagnosis, Drug Discovery and Patient Risk Prediction
- Manufacturing for Predictive Maintenance and Quality Control
- Security for Facial Recognition and Anomaly Detection

NC: Could you share examples of how AI is currently being applied in various industries, such as healthcare, finance, or manufacturing, and the impact it's having?

- **BKM:** Artificial Intelligence (AI) is making a significant impact across various industries, including healthcare, finance, and manufacturing. Here's an overview of AI applications and their impact in each of these sectors:

1. Healthcare:

a. **Diagnostics and Imaging:** AI is being used to analyze medical images such as X-rays, MRIs, and CT scans. Deep learning algorithms can detect abnormalities, helping radiologists make more accurate diagnoses. This has the potential to improve early detection of diseases like cancer.

FEATURE STORY

b. Drug Discovery: AI accelerates drug discovery by analyzing vast datasets to identify potential drug candidates. It can predict how molecules will interact with biological targets, reducing the time and cost of drug development.

c. Predictive Analytics: AI algorithms can analyze patient data to predict disease outcomes and identify at-risk individuals. This enables proactive and personalized healthcare interventions.

Impact: AI is enhancing the accuracy and efficiency of healthcare delivery, improving patient outcomes, reducing costs, and enabling early disease detection.

2. Finance:

a. Algorithmic Trading: AI-powered algorithms can analyze market data in real-time, execute trades, and optimize portfolios. This increases trading efficiency and can lead to higher returns.

b. Fraud Detection: AI can detect fraudulent transactions by analyzing patterns and anomalies in financial data, helping financial institutions protect against fraud.

NC: Natural Language Processing (NLP) is a critical component of AI. How is NLP being used to improve communication between humans and machines?

BKM: Natural Language Processing (NLP) is a subfield of artificial intelligence (AI) that focuses on the interaction between humans and computers through natural language. NLP is being used to improve communication between humans and machines in various ways:

Conversational AI:

Chatbots: NLP-powered chatbots and virtual assistants can engage in text-based or voice-based conversations with users to answer questions, provide information, and assist with tasks.

Voice Assistants: Voice-controlled AI systems like Siri, Alexa, and Google Assistant use NLP to understand and respond to spoken commands and questions.

Sentiment Analysis: NLP techniques can analyze social media posts, reviews, and customer feedback to determine sentiment (positive, negative, neutral). This helps companies gauge public opinion and customer satisfaction.

Language Translation: NLP has enabled the development of sophisticated machine translation systems like Google Translate, which can translate text and spoken language between multiple languages.

Content Generation: NLP models like GPT-3 are capable of generating human-like text based on input prompts. This technology is used for content creation, chatbots, and even creative writing.

The application of NLP in improving communication between humans and machines is continually expanding, and it has the potential to enhance user experiences across various domains, from customer service and healthcare to education and entertainment.

NC: Bias in AI algorithms has raised concerns about fairness. What measures can be taken to mitigate bias and ensure fairness in AI systems?

BKM: Mitigating bias and ensuring fairness in AI systems is a critical

ethical concern. Bias in AI can lead to discriminatory outcomes and reinforce existing inequalities. Here are measures that can be taken to address bias and promote fairness in AI systems:

NC: Finally, what do you envision for the future of AI, and how do you believe it will continue to shape our society and daily lives?

BKM: The future of AI holds immense potential to shape our society and daily lives in profound ways. While it's challenging to predict precisely how AI will evolve, there are several key trends and potential developments to consider

Increased Integration in Daily Life: AI will become increasingly integrated into everyday devices and services, from smartphones and smart homes to autonomous vehicles and healthcare systems.

Enhanced Personalization: AI will enable highly personalized experiences in areas like entertainment, healthcare, and education, tailoring content and services to individual preferences and needs.

Continued Automation: Automation through AI will continue to transform industries such as manufacturing, logistics, and customer service, leading to increased efficiency and cost savings.



संकल्प

2023



SANKALP 2K23

EVENTS FOR EVERY ONE

Sankalp 2023 is an exciting event filled with inspiring talks, interesting workshops, new technology, competitions, and amazing performances. Everyone can show their skills and win prizes. It's a fun and captivating experience, offering a break from everyday life and a chance for everyone to enjoy.

FIRST DAY: INAUGURAL SPLENDOR: SANKALP 2023'S GRAND UNVEILING

The grandeur of Sankalp 2023 was unveiled under the patronage of Dr. P K Parhi, Chairman, ISTE Odisha section, with the eloquent opening address delivered by the visionary Dr. Sukant K. Mohapatra, founder chairman, NIST, in the virtual realm. Amidst the inaugural splendor, Mr. Sayed Imran, President of ISTE student chapter, Mr. Sritam Shraban Rath, Secretary of ISTE student chapter, and Ms. Kajal Kumari delved into the rich history and glory of Sankalp. Dr. Priyadarshi Tripathy, Principal, NIST, showered gratitude upon the diligent student and faculty members for orchestrating this monumental event. Prof. Mitu Baral, the esteemed Faculty Advisor of NIST ISTE student chapter, extended heartfelt thanks to all for their unwavering support and seamless coordination.

On the inaugural day of SANKALP 2023, the campus came alive with a myriad of club activities, each a testament to the passion and innovation of the students. Enthusiastic club members showcased their prowess through an impressive array of events. Different club activities took center stage during the event. Club Eureka organized 'Teevra,' Renewable Energy Club (Rec) presented 'NavosthanPrastuti,' Club Innova hosted 'Fortune Tambola,' Club Multimedia

led the exciting 'Treasure hunt'. NSS curated 'Tangzimana,' while Electronic Hubby Club dazzled with 'SampratyaPrastuti. Cloud Computing Club offered the intense 'Battle Royal & Quiz-Quench, and Data Science Club engaged minds with 'Quiz and Code Debugging. Art & Dramatic Club's Kala-Kautilya, CAT Club's 'Bid The Bidder,' Club Excel's 'Code & decode,' and NCS's 'Drishyam' added variety. Management Club enthralled with the 'Ad mad show ,' Civengs Society showcased 'NIST Replica,' and NCC presented 'Model presentation.' NIST Dramatic Club brought 'Eye to Eye,' while NIST Robotics Club thrilled with 'Robowar". The technical session featured student paper presentations, followed by a Hackathon, enhancing the intellectual fervor of the event.

The cultural night came alive with mesmerizing performances. A graceful Odissi dance set the stage for an evening filled with talent and enthusiasm. The highly anticipated Mr. and Miss Sankalp competition added an element of excitement, with first-year and second-year students showcasing their unique talents. The night culminated in exceptional performances by NIST Musical Society and NIST Dance Club, leaving the audience spellbound.



SANKALP 2K23

ABHYUDAYA: SEASONS OF LIFE

Life, like nature, has different seasons - think of them as winter, spring, summer, and fall. In the past, people were closely connected to these seasons, adapting their lives, diets, and habits accordingly. But in today's tech-driven world, we've lost touch. We stick to the same routine year-round, forgetting the natural cycles. Each season has a purpose, and our lives shouldn't be judged by just one. Remember, seasons change. This idea inspired the theme "ABHYUDAYA: SEASONS of LIFE" at SANKALP-2023.

This event, steeped in the spirit of innovation, aimed to nurture the brilliance of young minds. In collaboration with the Indian Society for Technical Education (ISTE) Students Chapter, Sankalp united technocrats from diverse colleges, fostering a platform where talents thrived, defying challenges to attain unparalleled fame and glory. The symposium's crescendo was a cultural extravaganza, a testament to the power of unity and creativity was successfully organized by NIST Berhampur on 30-31st march 2023 at NIST campus, Pallur Hills, Berhampur.

FACULTY ADVISOR OF NIST ISTE SANKALP 2K23



Prof. Mitu Baral
Advisor, NIST ISTE Student Chapter

In 2003, my journey as a student at NIST commenced, coinciding with the initiation of the techno-management symposium SANKALP. Little did I know then, that SANKALP would become an integral part of my life's narrative. As a student, I eagerly embraced the vibrant atmosphere of creativity and innovation that permeated the campus during the event. Later, during my tenure as a faculty advisor, I witnessed the symposium evolve and thrive under the dedicated guidance of esteemed professors such as Prof. Satyabrata Das, Prof. Ajay Rath & Prof. Mihir Hota

When the world faced unprecedented challenges due to the pandemic, leaving a void in the hearts of everyone associated with the event, however, in 2022, amidst uncertain times, I was entrusted with the responsibility to revive the event and lead it forward. It was a moment filled with immense joy, as well as a sense of the significant challenges that lay ahead.

With the unyielding support of the NIST community: dedicated faculty members, enthusiastic students, and the cooperative efforts of both academic and non-academic staff, we successfully organized the event. The steadfast backing from the management team proved invaluable, allowing us to breathe life back into SANKALP 2023. Together, we curated an unforgettable experience for everyone involved.

One of the highlights was the STAR night, where we managed to bring national-level performers, leaving the audience in awe of their talent. The event not only exceeded expectations but also left a lasting impression, turning it into a cherished memory for every participant.

OFFICE BEARERS OF NIST ISTE SANKALP 2K23



Mr. Sayed Imran
President, NIST ISTE Student Chapter



Mr. Sritam Shraban Rath
Secretary, NIST ISTE Student Chapter



Ms. Kajol Kumari
Treasurer, NIST ISTE Student Chapter

Reviving the one of the biggest south-east asia's event Sankalp of NIST with full enthusiasm. So, let us embrace this opportunity to connect, learn, and collaborate with one another, as we strive towards building a better future for all.

I am thrilled to express my gratitude and appreciation for everyone who made this event a grand success. It was an honor to be a part of the organizing team and work alongside such a talented and dedicated group of individuals.

"Avyudaya", the theme suggests sunrise and prosperity. That's everything that we are focusing on to make this Sankalp the best one we ever had. With lots of hope and optimism, we bring you Sankalp-2023.

SANKALP 2K23

EVENTS FOR EVERY ONE

SECOND DAY: EPIC MOMENTS UNFOLD

The second day of the event burst into action with an array of electrifying club activities. Club Eureka unleashed the thrilling 'Squid Game,' while Rec hosted the intellectually stimulating 'Gyanam Pratispardha.' Club Innova dared minds with a captivating 'Treasure Hunt,' and Club Multimedia immersed participants in the heart-pounding 'Krunker Arena.' NIST Astronomy Club offered a unique experience with 'VR Display,' and NSS curated the artistic spectacle 'Tangzimana.' EHC showcased creativity with the mind-bending 'On-Spot Circuit Design'. The adrenaline-fueled journey continued with Cloud Computing Club's intense 'Battle Royal' and Data Science Club's rhythmic 'Song and Step Surprise.' Art & Dramatic Club captivated the audience with 'Sansiddhi,' while CAT Club orchestrated the strategic 'Grandmaster.' Club Excel led the charge with the challenging 'Code Crusade,' and NCS brought

intrigue with 'Drishyam.' Management Club honed teamwork with a compelling 'Team Building' & 'Paper Presentation on Business Plan'. NIST Dramatic Club set the stage ablaze with the fierce 'Battle Of Beats,' and Civengs Society engaged everyone with the strategic thrill of 'Jenga.' NIST Robotics Club added a high-tech touch with the intense 'Robowar.' In the afternoon, the technical session took center stage, featuring compelling technical paper presentations and an intense Hackathon that challenged the participants' skills and creativity.

As the sun set, excitement grew for the much-awaited celebrity night. DJ Deep's music created unforgettable memories. EPR IYER's passion lit up the stage. The crowd felt the energy, celebrating talent and passion for innovation.



SANKALP-2023 was more than an event; it was a delightful journey showcasing the determination and creativity within us. Each presentation, challenge, and applause told a tale of innovation and resilience. Together, we formed a vibrant community cherishing knowledge, creativity, and the power of ideas.

In the end, SANKALP-2023 became a testament to the incredible capabilities of young minds. It taught us that embracing creativity isn't just a choice; it's a lifestyle. This event was the spark that lit up endless possibilities. Here's to the future we all dreamed of—a future where there are no boundaries to what we can achieve together.

WELCOME TO NEW FACES OF THE NIST FAMILY

Dr. Amit Patnaik



**Assistant Professor
(Biotechnology)**

Dr. Amit Patnaik, an Assistant Professor in the Department of Biotechnology, earned his Ph.D. in 2016 from Ranchi University with a focus on anti-cancer plants and bioactive compounds. His M.Sc. in Biotechnology was completed in 2005. With 16 years of experience in both industry and teaching, his interests lie in Molecular Diagnostics, Bioinstrumentation, and Cancer research. Dr. Patnaik has made notable contributions, with 23 publications in journals of national and international repute.

Dr. Puspanjali Jena



**Assistant Professor
(Mathematics)**

Dr. Puspanjali Jena serves as an Assistant Professor in the Mathematics dept. and achieved her Ph.D. in 2023 at SOA University, BBSR, with a specialization in "Numerical Methods for Fractional Differential Equations and its Applications." Her Master's degree, attained in 2014 from Khallikote (Autonomous) College, Berhampur, laid the foundation for her expertise. Drawing from 3 years of combined Industry and academics experience, her focus revolves around Fractional Differential Equations and Numerical Methods.

Dr. Kali Prasad Rath



**Assistant Professor
(Mathematics)**

Dr. Kali Prasad Rath joined as Assistant Professor in the Mathematics Department. He is continuing his PhD in SOA University, specializing in "Qualitative Behaviors of Difference Equations." With 17 years of experience in both industry and teaching, his expertise is a valuable asset. Dr. Rath's primary focus is Difference Equations, and his dedication to this field shines through in his research and teaching.

Dr. Deepak Kumar Swain



**Assistant Professor
(Physics)**

Dr. Deepak Kumar Swain, joined as Assistant Professor in the Physics Department. He has obtained his Ph.D. in 2022 from IIT Bhubaneswar. His doctoral research delved into "Studies of Self-assembly and Chirality Dependent Optical, Magnetic, and Electric Polarization Properties of Atomic Gold Clusters." Dr. Swain completed his Master's degree in Physics at Berhampur University in 2014. His fields of interest encompass Nanoclusters, Water Splitting Properties of Gold Clusters, and Surface Modification of Metal Oxides & Semiconductors

through Ion Implantation for Device Applications.

Dr. Manoj Kumar Pradhan



**Assistant Professor
(Chemistry)**

Dr. Manoj Kumar Pradhan, an Assistant Professor in Department of chemistry, earned his Ph.D. in 2018 from the Indian IIT Guwahati, with a thesis focused on the "Interaction of small fluorescent molecules/nucleosides with duplex, G-quadruplex, and calf thymus DNA". Dr. Pradhan completed his Master's degree in Science from Sambalpur University in 2009. With five years of teaching experience, his field of interest revolves around Organic Photophysical Study and the design and synthesis of G-quadruplex fluorescent probes.

Mr. Amaresh Kumar Mohanty



**Assistant Professor
(Computer Science and Engineering)**

Mr. Amaresh Kumar Mohanty, joined as Assistant Professor in the Computer Science and Engineering Department. He holds an M.Tech in CSE from Utkal University, completed in 2017, with a master's project on "Odia Character Recognition." with a combined experience of over 10 years in both industry and academia; his areas of interest encompass Discrete Structures, Artificial Intelligence, and Machine Learning.

WELCOME TO NEW FACES OF THE NIST FAMILY

industry and academia; his areas of interest encompass Discrete Structures, Artificial Intelligence, and Machine Learning.

Dr. Runu Sahu



**Assistant Professor
(Mathematics)**

Dr. Runu Sahu, joined as Assistant Professor in Mathematics, earned her Ph.D. in 2016 from Berhampur University, specializing in "Two-Phase Flow Phenomenon." With 19 years of teaching experience, her expertise shines through. Dr. Sahu's primary focus is Fluid Dynamics, where she's contributed significantly through publications.

Ms. Kshirabdhi Tanaya Nayak



**Assistant Professor
(English)**

Ms. Kshirabdhi Tanaya Nayak, joined as Assistant Professor in the English Department, earned her Master's in English from Utkal University, Bhubaneswar. Her master's project explored "A Discourse on Bioterrorism" through the study of select short stories.

Mr. N. Toyaad Kumar Reddy



**Lab Instructor
(Computer Science and Engineering)**

Mr. N. Toyaad Kumar Reddy, joined as Lab Assistant in the Computer Science and Engineering Department, is currently pursuing his Master's degree at NIST. He completed his Bachelor's degree in CSE from the same institution in 2022, focusing on a project titled "Auto Sanitizing Tunnel with Face Mask Detection." With one year of experience as a lecturer, Toyaad's fields of interest encompass Machine Learning, Blockchain Technology, and Compiler Mechanisms.

Mr. Khirod Kumar Sahu



**Lab Instructor
(Computer Science and Engineering)**

Mr. Khirod Kumar Sahu, joined as Lab Assistant in the Computer Science and Engineering (CSE) Department, holds a Bachelor's degree in CSE from our institution, NIST, class of 2016. With a rich background spanning both industry and teaching, including roles at IBM, Quinnox, and Quadgen Mastech, he brings real-world experience to the classroom. Mr. Sahu specializes in Web Technology, covering both Frontend and Backend Technologies.

Ms. Pragnya Kumari Pradhan



**Lab Instructor
(Chemistry)**

Ms. Pragnya Kumari Pradhan, joined as Lab Instructor in the Chemistry Department. She holds a Master's degree in Chemistry from the National Institute of Science and Technology, Berhampur University, completing her program in 2022. Her Master's project focused on "Size-Controlled Synthesis, Characterization, and Possible Applications of Nanocomposites."

Ms. Shubhasri Pradhan



**Lab Instructor
(Computer Science and Engineering)**

Ms. Shubhasri Pradhan, joined as Lab Instructor in the Computer Science and Engineering department. She holds a Master's degree in Computer Science and Engineering from NIST, completing her program in 2022 with a project focused on the "TLBO Algorithm for a hybridized NP Hard Problem". Her areas of interest encompass Web Technology, Software Development, Data Structures, and Data Analysis.

Mr. Abhimanya Nayak

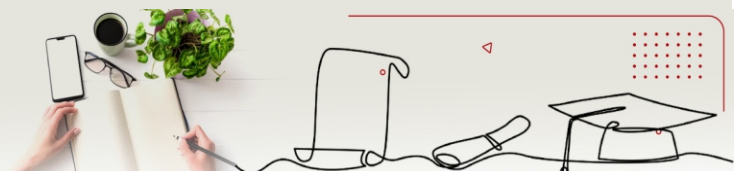


**Driver
(Transport Department)**

Mr. Abhimanya Nayak, an integral part of our Transportation Department, where he proudly serves as a Driver. His qualifications include a 10th-grade, but it's his remarkable 35 years of driving experience in heavy vehicles that truly sets him apart.

LIST OF PH.D SCHOLARS

Name of the scholar	Department	Mode
Mr. Kolla Lakshmi Narayana	CSE	Autonomous
Mr. Subhasis Mahata	CSE	Autonomous
Mr. Pradeep Kumar Rath	CSE	Autonomous
Ms. Manisha Patro	CSE	Autonomous
Mr. Bibhuti Bhusan Mishra	ECE	Autonomous
Mr. Manoja Kumar Senapati	ECE	Autonomous
Ms. Sasmita Padhy	ECE	Autonomous
Mr. Shankha Mitra Sunani	ECE	Autonomous
Mr. Partha Sarathi Padhy	ECE	Autonomous
Mr. Mitu Baral	ECE	Autonomous
Mr. Hrudaya Kumar Panigrahi	EE	Autonomous
Mr. Umesh Prasad Rath	EE	Autonomous
Mr. Priyabrata Dash	Management	Autonomous
Mr. Samir Kumar Mahapatro	Management	Autonomous
Ms. Truptimayee Das	Management	Autonomous
Mr. Parveen Kumar Patra	CSE	Autonomous
Mr. Vivek Priyadarshi Dash	CSE	Autonomous
Mrs. Kumari Manswini Padhy	CSE	Autonomous
Mr. Ashish Kumar Dass	CSE	Autonomous
Ms. Nibedita Priyadarsini Mohapatra	CSE	Autonomous
Ms. Raja Rajeswari	ECE	Autonomous
Mr. Abinash Kumar Pala	ECE	Autonomous
Mr. Alok Kumar Mishra	ECE	Autonomous
Mr. Padarbindo Panda	EE	Autonomous
Mr. Sandeep Mishra	Management	Autonomous
Mr. VenuMaragani	Management	Autonomous
Mr. Laxmi Vandana	ECE	NCR
Mr. Partha Pratim Maiti	ECE	NCR
Mr. Ashok Kumar Kovuru	ECE	NCR
Mr. Kotni Krishnam Raju	ECE	NCR
Mr. Raghaven Jampana	CSE	NCR



INNOVATION & RESEARCH FRONTIER

PATENT PUBLISHED

- **Dr. Preeti Ranjan Sahu**, Associate Professor, Department of Electrical Engineering has published an Indian patent entitled “A windmill apparatus for generating electric power to a grid point of an electric network by using dump load and power converter”. The patent application no. is 202331009143. The other innovators are P. .K Hota, L. K. Sahu, A. Sahoo, M. M. Elahi, S. Panda.
- **Dr. Akankshya Patnaik**, Associate Professor, Department of Management has published an Indian patent entitled “Solar powered device to track nutrients in agri water”. The patent application no. is 388845001. The other innovators are Dr. Bijaya Bijeta Nayak, Dr. Shiv Sankar Das, Ms. Debashree Debadatta Behera, Dr. Kshitish Kumar Khuntia, and Mr. Satya Prakash Lenka.

JOURNAL PUBLICATION

- Prof. **Santosh Kumar Panda** faculties of Dept. of Mechanical Engineering have published a research article entitled “Optimization of the geometric profile of a crescent orifice” in the International Journal of Fluid Mechanics Research in 2023, having DOI 10.1615/InterJFluidMechRes.2023047456. The other researchers are Sunil Kumar Nepak.
- **Dr. Preeti Ranjan Sahu**, Associate Professor, Department of Electrical Engineering has published a research article entitled “Frequency Control of Power System with Distributed Sources by Adaptive Type 2 Fuzzy PID Controller”, in the Journal of Electric Power Components and Systems in Jun. 2023. The other researchers are Srinivasan Kullapadayachi Govindaraju, Raghuraman Sivalingam, Sidhartha Panda, Sanjeevikumar Padmanaban.
- **Dr. Preeti Ranjan Sahu**, Associate Professor, Department of Electrical Engineering has published a research article entitled “Optimal Congestion Management with FACTS Devices or Optimal Power Dispatch in the Deregulated Electricity Market”, in the Journal of AXIOMS in Jun. 2023. The other researchers are A. Sahoo, P. K. Hota, F. Alsaif, S. Alsulamy, T. S. Ustun.
- **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering has published a research article entitled “A Novel Metaheuristic Jellyfish Optimization Algorithm for Parameter Extraction of Solar Module”, in the Journal of “International Transactions on Electrical Energy Systems” in 25th July 2023. The other researchers are Dilip. Yadav, Nidhi. Singh, Vikas. Singh Bhadoria and Nimay Chandra Giri.
- **Dr. Murthy Cherukuri** Professor, Dept. of Electrical Engineering and **Dr. Kunjabihari Swain** Associate Professor, have published a research article entitled “Dual-tree complex wavelet packet transform and regularized extreme learning machine-based feature extraction and classification of power quality disturbances”, in the Journal of “Energy Systems” in 28th July 2023. The other researchers are Indu Sekhar Samanta, Pravat Kumar Rout and Satyasis Mishra.
- **Dr. Amarnath Padhi**, Associate Professor, Dept. of Management Studies has published a research article entitled “The Role of Human Resource Analytics: Analyzing the Factors influencing it in Organizations using SEM and ANOVA” in the Journal of Uncertain Systems in Jul. 2023.
- **Dr. Shrabani Mahato**, Asst. Professor, Dept. of Chemistry has published a research article entitled “Low-Temperature synthesis of peptized TiO₂ hydrosols with tunable surface charges for enhanced photocatalytic activity” in the Journal of Ceramic International in July 2023. The other researchers are B. K. Nahak, D. Mahata, N. Jhariya, P. Yadav, S. Panda, S. S. Sahu, K. Swatishree, A. Khedulkar, S. Bolloju, B. Pandit, and S. S. Mahato.
- **Dr. B. Sambhi Reddy**, Associate Professor, Dept. of Mechanical Engineering has published a research article entitled “Effect of Process Parameters on the Hardness and Fracture toughness of ZTA Ceramics using Central Composite Design” in the Journal of Corrosion and Protection, in Jul. 2023.
- **Dr. B. Sambhi Reddy**, Associate Professor, Dept. of Mechanical Engineering has published a research article entitled “Influence of Hybridization on the Mechanical, Moisture and Thermal Properties of Composite Materials” in the Journal of Aeronautical Materials, in Jul. 2023. The other researchers are T. Ramu, and K. Raja Narendra Reddy.
- **Dr. Ratikanta Nayak**, Asst. Prof, Dept. of Physics, has published a research article entitled “Interfacial interaction of controlled poly (ether-imide)(PEI)- titanium dioxide- based nanocomposites” in the Journal of “Materials Today: Proceedings” in Aug. 2023. The other researchers are Mr. Sushil Kumar Verma, Mr. Gyaneshwar Sharma and Mr. Gopikishan Sabavath.

INNOVATION & RESEARCH FRONTIER

- Dr. **Sandipan Mallik**, Associate Professor, Department of Electronics & Communication Engineering has published a research article entitled “A Review on Borophene: A Potential Gas-Capture Material” in the journal of Electronics Material on April 2023. The other researchers are S Mohanty, D Panda, A Dash, S. S Kumar, R R Padhi, S Guhathakurata.
- Dr. **Sandipan Mallik**, Associate Professor, Department of Electronics & communication Engineering has published a research article entitled “Novel graphene transfer method to silicone and its sensing application on porous PDMS” in the journal of IEEE Sensor Letters in April 2023. The other researchers are P P Pancham, A Mukherjee, B L Yuan, P Yu, W-H Chiu, G Ahmad

CONFERENCE

- Dr. **Kunjabihari Swain**, Associate Professor, Dept. of Electrical Engineering has presented a research article entitled “Breast Cancer Detection Using Variational Mode Decomposition (VMD) and Weighted Bidirectional Extreme Learning Machine” at the International Conference “2023 International Conference in Advances in Power, Signal, and Information echnology (APSIT)” in Jun. 2023. The other researchers are Sukumar Joshi, Indu Sekhar Samanta, Subhasis Panda, and Pravat Kumar Rout.
- Mrs. **Charulata Palai**, Assistant Professor, Dept. of Computer Science and Engineering and Mr. Pradeep Kumar Jena, Assistant Professor has presented a research article entitled “Efficient Airline Price Prediction using Hybrid Machine Learning Techniques” at International Conference on Communication, Circuits, and Systems (IC3S) in May 2023. The other researcher is Purn Sridhar Sandil.
- Prof. **Akankshya Patnaik**, Associate Professor, Dept. of Management. Presented a paper entitled “A Review on Virtual Tourism –A step towards sustainable economy” in a conference entitled “National Seminar on Prioritising Welfare in market Driven Indian Economy” on 31th March 2023. The other researcher is Ms. E. Kiran Patro.
- Prof. **Akankshya Patnaik**, Associate Professor, Dept. of Management. Presented a paper entitled “Implementation of AI in Human Resource Management: A Systematic Literature Review” in a conference entitled “International Conference: Realigning Dynamics at work place for workforce” on 19-20 May 2023. The other researcher is Mr. Priyabrat Dash.
- Prof. **Akankshya Patnaik**, Associate Professor, Dept. of Management. Presented a paper entitled “A Systematic Review on the leadership role in the Management of workplace bullying: Start of Art and future research agenda” in a conference entitled “3 rd International Conference on Contemporary Business Trends” on 8-9 July 2023. The other researchers are Mr. Samir Ku Mahapatro and Dr. Gayatri Panda.
- Mr. **Durga Madhab Padhy**, Assistant Professor, Dept. of Management, presented a paper entitled “Literature review on the effects of work-life balance on employee” in a conference entitled “Realigning Dynamics At Workspace For Workforce” on 20 May 2023. The other researchers are Padhy, Dr. Sadananda Sahoo, and Dr. Santanu Kumar Das.
- Dr. **Susmita Mahato**, Assistant Professor, Dept. of Computer Science and Engineering, presented a paper entitled “Snake-Stega: A snake game-based steganography scheme” in a conference entitled “2023 Third International Conference on Secure Cyber Computing and Communication (ICSCCC)” at Department of Computer Science & Engineering, Dr B R Ambedkar National Institute of Technology, Jalandharon 26 May 2023.
- Dr. **Sandipan Mallik**, Associate Professor, Department of Electronics & communication Engineering has presented a paper entitled “Functional Composite Silicone Made by Roll-to-Roll Manufacturing for Sensing Applications and Circular Economy” at 2023 IEEE International Flexible Electronics Technology Conference (IFETC) on 13 August 2023.

BOOK CHAPTER

- Dr. **Preeti Ranjan Sahu**, Associate Professor, Department of Electrical Engineering has published a book chapter entitled “Modified Sine Cosine-Based Controller for Microgrid Frequency Regulation” in the book “Recent Developments in Electrical and Electronics Engineering(ICRDEEE-2023)” by Springer Nature Dec 2022.
- Dr. **Manabendra Patra** and Dr. **Duryodhan Sahu**, Professor, Department of Chemistry have published a book chapter entitled “Perspective Chapter: Environment Friendly Agro Waste Management” in the book entitles “Solid Waste and Landfills Management- Recent advances” having DOI: 10.5772/intechopen.107505 in June 2023.

INNOVATION & RESEARCH FRONTIER

- Dr **Kunjabihari Swain**, Associate Professor, Department of Electrical Engineering and Dr. Sandipan Mallik, Associate Professor, Department of Electronics and Communication Engineering Published a book chapter entitled “Automatic Fault Detection, Locating, and Monitoring in Distribution Lines Using LabVIEW” in the book entitled “Intelligent Technologies for Sensors” having DOI:10.1201/97810 03314851, published by CRC Press in Jun. 2023. The other authors are Kanishk Kashyap, Sumanjit Pattanayak, Arpita Bebartha.
- Dr. **Ratikanta Nayak**, Asst.Prof, Dept. of Physics, has published a book chapter entitled “Polymer Nanocomposite Material for Energy Storage Application” in the book entitled “Dielectric Materials for Energy Storage and Energy Harvesting Devices” published by River Publishers in Aug. 2023.
- Dr.**Sandipan Mallik**, Associate Professor, Department of Electronics & communication Engineering has published a book chapter entitled “IoT-Based Smart Security and Home Automation System” in the book Intelligent Technologies for Sensors by CRC Press on June 2023
- Dr.**Sandipan Mallik**, Associate Professor, Department of Electronics & Communication Engineering has published a book chapter entitled “Automatic Fault Detection, Locating, and Monitoring in Distribution Lines Using LabVIEW” in the book Intelligent Technologies for Sensors by CRC press on June 2023
- Dr.**Sandipan Mallik**, Associate Professor, Department of Electronics & communication Engineering has published a book chapter entitled “ A Low-Cost Advanced Device for the Detection of Pesticides with NDVI Method ” in the book Intelligent Technologies for Sensors by CRC press on June 2023

WORKSHOP ATTENDED

- Mr. **Durga Madhab Padhy**, Assistant Professor, Dept. of Management attended One Week Online Faculty Development Program Organised by ICFAI University Raipur, entitled “Realigning Dynamics At Workspace For Workforce” from 10th July 2023 to 15th July 2023.

PHD SUPERVISED

- Dr.**Bhaskar Bhaula**, Associate Professor, Dept. of Mathematics guided one Ph.D. candidate as Co-supervisor University from SoA (Deemed to be University) with Title: “EOQ AND EPQ INVENTORY MODELS WITH VARIOUS DEMAND FUNCTIONS” and the date of award is 31/5/2023. The name of the student is M.Rajendra Kumar, Associate Professor, Department of Mathematics, NIST, Berhampur.

PHD AWARDED

- Dr. **M. Rajendra Kumar**, Associate Professor, Department of Mathematics has completed his Ph.D. from University from SoA (Deemed to be University) with Title: “EOQ AND EPQ INVENTORY MODELS WITH VARIOUS DEMAND FUNCTIONS” and the date of award is 31/5/2023. The name of the supervisors are Dr. Jayanta Kumar Dash, Professor, Department of Mathematics, ITER, SOA University, Bhubaneswar, and Dr. Bhaskar Bhaula, Associate Professor, Department of Mathematics, NIST, Berhampur.



WORKSHOP, SEMINAR & TALK

illuminating the Path to the Future: Prof. A.K Ganguli's Nanotechnology Session at NIST



In a captivating event, Prof. Ashok Kumar Ganguli, Hon'ble Director of IISER Berhampur, held NISTians in rapt attention with an enlightening session on "Nanotechnology in Nature and for the Future." This event was part of the ongoing celebrations of Azadi Ka Amrit Mahotsav, where IISER Berhampur seeks to commemorate this historic occasion and highlight the profound impact of science in our lives. Prof. Ganguli's session was a beacon of knowledge, illuminating the incredible potential of nanotechnology to revolutionize various fields. He showcased how the world of nanotechnology holds the key to groundbreaking advancements in medicine, energy, and numerous other domains. With every revelation, he inspired NISTians to envision a future where science and technology will shape a better world. Prof. Ganguli's visit left an indelible mark on the NIST community, serving as a reminder of the boundless possibilities that science and innovation hold for the future.

Unravelling the Essence of Intellectual Property Rights



Dr. T Pavan Kumar, Senior Scientist - Chemistry & IPR, CSIR, IMMT, Odisha delivered an enlightening session focused on Intellectual Property Rights (IPR) from the perspective of academics and research. During his talk, he shed light on the crucial aspects of discovery, invention, and innovation. Dr. Kumar went on to elaborate on the significance of various intellectual property elements, such as trademarks, copyrights, patents, and geographical indication (GI) tags, particularly in today's digital era. Dr. Kumar effectively conveyed the significance of IPR and its vital role in fostering and protecting intellectual creations.

Innovation & Entrepreneurship: Transforming Higher Education Institutions



An international Innovation talk on "R&D and Technology-Led Innovation and Entrepreneurship in HEIs for Self-Reliance" on April 7th, 2023 has been organized by the Institute Innovation Council (IIC), NIST Berhampur. Dr. Bijay Kumar Sahu, the Senior Regional Manager, NRDC, GoI, was the keynote speaker, while Dr. Vijay Tiwari, Professor, Institute of Molecular Medicine, Univ. of South Denmark, and Dr. Jitendra Badhai, Sr. Scientist, Netherland Cancer Institute interacted with the research fraternity of the institute. It serves as a reminder that innovation and entrepreneurship are not just academic pursuits but transformative forces that can change societies and economies for the better.

NIST Joins G20 Celebration: Prof. Vishvas Chavan Explores 'The Greatness of Fundamentals of Science'



In a momentous celebration, NIST Berhampur, India, joined the prestigious ranks of institutions commemorating the G20 event. The significance of this occasion was underscored by an esteemed lecture delivered by Prof. Vishvas Chavan, the Dean of the Indian Institutes of Science Education and Research (IISER), Berhampur. The topic of his lecture resonated profoundly with the essence of science, titled "The Greatness of Fundamentals of Science." The event, held on April 18, 2023, was a remarkable testament to the enduring importance of scientific principles. His lecture underscored the foundational principles of science and their timeless relevance. Prof. Chavan's words resonated with students, faculty, and attendees, reaffirming the notion that science's fundamentals are the bedrock upon which innovation and progress are built.

WORKSHOP, SEMINAR & TALK

NIST Partners with EduCare Taiwan: Enhancing Opportunities for Students



NIST have signed an agreement with EduCare Taiwan on 13th April 2023, which is the biggest education platform promoting Taiwanese universities in India. This collaboration would help students increase their chances of admission and enable them to choose appropriate universities and supervisors. Ms. Sagarika Patnaik, Head of Operations of EduCare Taiwan, discuss possible opportunities for internship, higher studies, and student exchange programs. Additionally, Ms. Huilin Chen (Lin), the founder and CEO of EduCare Taiwan, addressed the audience online.

Innovative Prototyping & Funding: Workshop at NIST



On 25th April a sensitization workshop on "Advance Prototyping Techniques & Funding Opportunities" was organized by DST CoE, KIIT TBI at NIST Berhampur. Mr. Malay Mohapatra, Program Manager of CoE & MTI Hub, KIIT TBI, provided an overview of the latest prototyping technology and its application in various fields such as healthcare, agritech, industrial biotech, engineering, and other emerging areas of science. The workshop covered the process of transforming an idea from ideation to commercialization and how to give wings to one's ideas. Mr. Mohapatra also talked about funding schemes such as SIIP Scheme, DST Nidhi Prayas, Miety tide 2.0, SISFA, BIG, and many more.

IoT Revolution: Compressive Sensing Insights by Prof. Samrat L. Sabat

On 2nd June, Prof. Samrat L. Sabat, Hyderabad Central University delivered a distinguished talk on "Compressive sensing on the Internet of Things (IoT)". Prof. Sabat explored various aspects related to IoT



platform structures and highlighted the significance of compressive sensing techniques in the realm of temporal signals.

Prof. Kanhu Charan Patra's Inspirational Talk



Prof. Kanhu Charan Patra, Professor, Dept. of Civil Engineering, NIT Rourkela, delivered an inspiring talk on "How to decide our priorities in life through our free will" on 1st July 2023. He brilliantly connected science and spirituality, revealing how our choices shape our destinies. Prof. Patra shed light on the importance of work satisfaction, ethical values, and balancing materialistic pursuits with inner contentment. He reminded us that true success lies not just in external accomplishments, but also in finding fulfillment within ourselves.

A talk on South Odisha's Cultural Heritage



NIST organised a distinguished talk on "Cultural Heritage of South Odisha". Dr. Priyadarshi Tripathy, principal welcomed Dr. Bibekananda Kar, Retd Reader in Odia & highlighted the significance of preserving our cultural heritage, while Dr. Kar discussed the creation of Upendra Bhanja and the cultural heritage of South Odisha. Sayed Suleman Ali, Head of HR & Administration, also shared his insights on odia culture.

GUEST INTERVIEW



Mr. Ajay Kumar Mohanty
 Founder: A4Con Services Private Limited
 Place: Hyderabad

Mr. Ajay Kumar Mohanty, a versatile scholar with a keen interest in diverse fields such as law, management, finance, and international business, embarked on his career journey as an entrepreneur. During the post-corona period, he found inspiration through his wife and ventured into social entrepreneurship and sustainability, initiating various startups. One notable venture born out of this passion is A4Consultancy service, operating under the startup name A4Con Services Private Limited (A4CONSERV). A4ConServ is a sustainable advisory consulting company having rich experience in Education, Health and Environmental PPP projects. Business veterans coming from corporate and top consulting firms are torch bearers of their revolutionary mission. Despite encountering numerous challenges, he persisted in establishing his startup, making his life story both inspiring and fascinating.

In this context, Prof. Sabyasachi Rath (Dean of the College of Management & Liberal Arts), Advisor NIST Chronicle, had a brief conversation with him about his remarkable journey. We believe that our readers will gain valuable insights from his experiences, learning new things and finding motivation in his inspiring tale."

NC: From a High Salaried Job to a Startup Entrepreneur- What was the Trigger!

AKM: Salary is always a comfort and comfort will not allow any innovation. Since childhood I have been passionate about business and interacting with people. Post covid, we (me and wife, Dr. Anupama Mohanty) realized that it's time for starting something on our own. The idea was to survive and let other's survive. It is important to have a vision and mission, for achieving life goal.

NC: What made you to choose this business? What is the nature of your startup business?

AKM: Social Entrepreneurship and Sustainability are the core areas close to our (me and my wife) heart. So, we decided to start a sustainability consulting firm, A4Con Services Private Limited (A4CONSERV) which can provide solutions in alignment with UNSDG. We are into;

(a) **EdTech-** a single platform for Kindergarten to Post Graduation level with a premium learning mobile app called "AARSHI"- the first ray of sunlight.

(b) **HealthTech-** a health care solution for everyone at doorstep (RPMS- Remote Patient Monitoring System) and a Mission Against Malnourishment (MAM)

(c) **CleanTech-** Providing end-to-end environmental solutions- Wealth out of Waste (WOW)

NC: What kind of challenges did you confront with as you started? What are the key challenges now for the startup?

AKM: We came across many challenges like - Manpower, acceptability of the ideas, Capital or initial investment. Manpower and Capital are the main challenges now.

NC: Please name at least three personal qualities that you feel are essential to become an entrepreneur? Why?

AKM: The three "P"s are: **Perception-** the idea what we perceive should have clarity in thought,

Persuasion- Please pursue the idea what you are aiming for

Persistence- Please stick to the idea and be consistent.

NC: Business Idea or Money or People- What is the most crucial aspect of a start up? Please elaborate

AKM: Business Idea- if we have a right idea and we are convinced about it, then, Money and People will come to you.

NC: What words of wisdom you would like to give to our NISTians about becoming an entrepreneur?

AKM: There are two fundamentally important aspects, which are very vital for any start up entrepreneur. The first aspect is to be an ideator and convince yourself with the idea. The second aspect is about Believing in the 3C's to succeed: Developing a Creative idea, Conversion of Idea to Business Proposition and Arranging Capital, in the form of right investor-mentor.



ARTICLE : SCIENCE/ ENGINEERING/ MANAGEMENT

Quiet Quitting: The Perils of Silence

In the ever-evolving landscape of modern workplaces, a peculiar phenomenon has been quietly weaving its way through the fabric of organizations, an enigma known as "Quiet Quitting." In a world that reverberates with the sounds of bustling productivity, teamwork, and innovation, this silent retreat from engagement often goes unnoticed until its effects become palpable. To unravel this enigma is to comprehend the subtle art of disengagement and, in doing so, to rescue the fading sparks of dedication and loyalty. Quiet Quitting, as the name implies, is leaving one's job without making any overt announcement. Unlike the dramatic departures characterized by heated resignations or stormy confrontations, it occurs in hushed tones. It is disheartening when an employee, once genuinely committed and passionate about their role, begins to withdraw from their work, team, and organization. The signs are nuanced; their significance is easily overlooked, but their consequences are profound. As the adage goes,

Yet, as biotechnology's transformative capabilities burgeon, so too do questions of ethics and governance. The power to manipulate genes needs a delicate dance

"If your sincere employee became silent, it's a sign of an impending storm that could capsize the ship of your organization's success."

In an organization, if a sincere employee becomes silent, it is a sign of a deep-rooted malaise, an ailment that can weaken the foundations of the organization. This silence can manifest in various ways: diminished enthusiasm, waning productivity, reluctance to take on new challenges, and a gradual withdrawal from team activities. Nevertheless, the silence is the most telling sign of all the silence of a voice once eager to speak up, of a spirit once eager to engage. Quiet Quitting is a multifaceted puzzle. Its pieces may include burnout, un-fulfilment, unmet expectations, or a perceived lack of recognition. These pieces converge to create a portrait of an employee who, feeling unsupported or undervalued, chooses to suffer in silence rather than voice their concerns. The tragedy lies in the fact that these dedicated individuals, whose absence would be sorely felt, remain quiet, possibly out of fear or believing that their words will fall on deaf ears.

To address the enigma of Quiet Quitting and prevent its insidious spread, organizations must be proactive in fostering open Dialogue, recognizing and rewarding growth, investing in growth, promoting work-lifebalance, and engaging in continuous learning.

Quiet Quitting is a multifaceted issue that can manifest in various ways, making it difficult to detect. Some employees may avoid meetings or conversations with colleagues, while others may become less proactive or miss deadlines. Some may even become physically absent from work, taking more sick days or extended leave, while others may check out mentally, becoming disengaged and indifferent to their work. The reasons behind Quiet Quitting can be numerous and complex. It may stem from a need for recognition or appreciation, a toxic work environment, or growth opportunities. It can also result from burnout, stress, or mental health issues. Whatever the reason, organizations need to address this issue proactively and find ways to prevent it from happening. Organizations must create a culture that values open communication, feedback, and transparency to prevent Quiet Quitting. Managers should be trained to recognize and address the signs of disengagement before it is too late. Employees should be encouraged to voice their concerns and given opportunities to grow and develop their skills. By doing so, organizations can create a workplace where employees feel valued, engaged, and motivated to perform at their best.

The Impact of Modern Work Patterns:

The phenomenon of quiet quitting has become increasingly prevalent in modern work patterns, and its impact can be far-reaching. While employees may not physically leave their jobs, they may disengage from their work and organization for various reasons, such as burnout, lack of job satisfaction, or feeling undervalued. This can have several implications for the organization and its employees. One of the most significant impacts of quitting is decreased productivity. Employees' motivation and commitment decline when they disengage from work, resulting in lower productivity.

This can negatively affect the organization's overall performance, leading to missed deadlines, reduced quality of work, and increased costs. In addition, it can also impact team dynamics, as disengaged employees may need to pull their weight or contribute to collaborative efforts. Another impact of quitting is reduced creativity and innovation. Employees who are no longer mentally and emotionally invested in their work may become less likely to contribute new ideas and solutions. This can hinder progress and competitiveness in the modern business landscape, where innovation is crucial. With fresh perspectives and ideas, organizations may be able to

ARTICLE : SCIENCE/ ENGINEERING/ MANAGEMENT

Quiet Quitting: The Perils of Silence

stay ahead of the curve and adapt to changing market demands.

Quiet quitting can also lead to increased turnover. Employees who feel unfulfilled and unappreciated may eventually decide to leave the organization, leading to higher turnover rates. This can disrupt team dynamics and result in added costs for recruitment and training. Moreover, the morale and motivation of other employees can be affected by those who are quietly quitting. The remaining employees may wonder why their colleagues are leaving and whether they should consider doing the same. In addition, quitting can also impact employees' mental health and well-being. When employees are unhappy and disengaged at work, it can affect their mental health, leading to stress, anxiety, and depression. This can have a ripple effect on their personal lives, as well as their work performance. To address the issue of quitting, organizations need to focus on improving employee engagement and job satisfaction. This can be achieved through various means, such as providing opportunities for professional development, recognizing and rewarding employee contributions, and fostering a positive work culture. By prioritizing employee well-being and satisfaction, organizations can improve their overall performance and retain top talent. Quiet quitting has become a common phenomenon in modern workplaces, where employees silently disengage from work and eventually leave without formal resignation. This trend affects individual employees and hurts the entire organization. When employees quietly quit, they become disengaged and lose motivation to perform their duties. This disengagement can lead to a decrease in productivity and a decline in the quality of work produced.

Furthermore, when employees are not satisfied with their jobs, it can ripple effect on their colleagues, leading to a toxic work environment that can be contagious. Furthermore, when employees are not motivated or engaged, they are also more likely to take more sick days and have a higher rate of absenteeism. This can significantly impact the organization's bottom line, as it can result in a loss of productivity and increased costs due to overtime or hiring temporary staff. The negative impact of quitting can also lead to higher employee turnover rates, which can be costly for organizations. When employees leave without formal resignation, it can be difficult for employers to identify the reasons behind their departure and address any underlying issues causing the problem. This can lead to a cycle of poor job satisfaction and high turnover,

which can be difficult to break. Employers must take proactive steps to create a positive work environment to mitigate the effects of quiet quitting. This can include encouraging open communication, providing opportunities for feedback, and addressing any underlying issues that may be causing dissatisfaction. By doing so, employers can create a workplace culture that fosters engagement, motivation, and job satisfaction, ultimately leading to a more productive and successful organization.

Final Thoughts:

Quiet quitting is a term coined recently, just like a new wine in an old bottle, but the phenomenon it describes is not entirely new. People have been disengaging from various spheres of life for a long time, whether from their jobs, relationships, or other commitments. While the term may be new, the underlying factors driving quiet quitting have persisted. People disengage from their work or relationships for various reasons, such as feeling undervalued, unappreciated, or unsupported. They may also feel that their efforts need to be recognized or that they need to be given the opportunities they need to reach their full potential. The implications of quitting can be significant for both the individuals involved and the organizations or communities they are a part of. Disengaging can lead to decreased productivity, morale, trust, and cohesion. It can also hurt mental health, as people may feel that they are not living up to their expectations or that they are not making a meaningful contribution. Recognizing and understanding the implications of quitting is important, as it can help the organization take proactive steps to foster healthier relationships and productive workspaces and, ultimately, lead more fulfilling lives. This may involve creating a culture of appreciation and recognition, providing opportunities for growth and development, and building strong relationships based on trust and respect. It may also involve addressing systemic issues contributing to disengagement, such as a lack of diversity or a toxic work environment. In conclusion, while quiet quitting may be a new term, the underlying issues driving disengagement have persisted over time. By recognizing and addressing these issues, an organization can create a more positive and fulfilling work and social environment for everyone involved.



Dr. Amarnath Padhi
Assistant Professor
Department of Management, NIST

EVENTS & CLUB ACTIVITIES

Spreading Smiles through the "Joy of Giving" Initiative



Under the dedicated leadership of Prof. Nrusingha Tripathy, TEAM NSS, NIST embarked on a heart-warming mission to make a significant impact on the lives of the underprivileged. Through their "Joy of Giving" initiative, they extended their support with essential items and, more importantly, shared love and warmth with communities near the railway station, Gandhi Nagar, and a local orphanage.

"GIT and GITHUB" Workshop: Empowering Students with the "GIT and GITHUB" Workshop



NIST recently hosted a dynamic 2-Day workshop on GIT and GITHUB, which took place on the 4th and 5th of August. The workshop's primary goal was to equip students with the skills of collaborative coding and to unlock the remarkable potential of version control. Dr. M. Suresh, Ex-Principal(I/C) at NIST, inaugurated the event, with Dr. Sabyasachi Rath, Dean of CMLA. The response was truly overwhelming, as 140 students and 20 faculty members converged to delve into the world of GITHUB, eager to expand their knowledge. A heartfelt thanks goes to Prof. Raj Kumar and the club excel students.

NIST's Anti-Ragging Campaign Awareness

Uniting for a Safer Campus: NIST's Anti-Ragging Poster-Making Competition



In a celebration of creativity and unity, NIST's Data Science Club and Club Excel NIST joined forces to host a powerful Anti-Ragging Poster-Making Competition as part of Anti-Ragging Week. NISTians came together to raise their voices against ragging and cyberbullying, using the canvas of art to convey their powerful messages.

NIST Civeng's Club Takes a Stand Against Ragging



In a resolute commitment to nurturing a secure and inclusive campus environment, NIST Civeng's Club took a momentous stride during Anti-Ragging Week. Their mission was clear: to shed light on the grave consequences of ragging, aligning themselves with the guidelines of UGC and the Indian Penal Code.

Club INNOVA at NIST Champions the Cause Against Ragging



NIST's Club INNOVA embarked on a courageous journey during Anti-Ragging Week, organizing both a

thought-provoking poster competition and an inspiring slogan-writing competition, all under the theme of "Rise Above Ragging - Together We Stand." These initiatives aimed to shed light on the gravity of ragging as a crime and the potential legal consequences it carries. NISTians actively participated, gaining valuable insights into the lifelong trauma that ragging victims endure. The competitions fostered awareness about the critical need to maintain a peaceful and harmonious study environment.

Uniting Against Ragging: NIST's Campaign for Awareness and Action



During Anti-Ragging Week, NIST took a resolute step towards a future free from the shadows of ragging. Collaborating with the NIST Counselling Service (NCS) Club, the institution organized an enlightening seminar titled "Unite Against Ragging: A Campaign for Awareness and Actions." Dr. Kalikinker Pattnaik, an expert nominated by the Center for Cultural Resources and Training (CCRC), New Delhi, graced the event as the distinguished guest speaker. His insightful words resonated deeply, emphasizing the often imperceptible impact of ragging and the urgent need to combat it. Dr. Pattnaik stressed the importance of nurturing respect, kindness, and soft skills as essential tools in breaking the cycle of ragging. The power of synergy emerged as a formidable force to eliminate ragging from our midst. Credit goes to Prof. Minakshi Dash and the dedicated club students.

EVENTS & CLUB ACTIVITIES

NMS Won Sonic Showdown: NIST Musical Society Strikes a Winning Chord at SONIC SHOWDOWN



A glorious flashback of NIST Musical Society's triumphant journey takes us to the electrifying battleground of Xtasy 2k23, OTR, Bhubaneswar. At the highly anticipated annual Battle of the Bands, known as SONIC SHOWDOWN, they emerged as the champions, clinching the coveted first prize. The atmosphere crackled with energy as the NMS Club took centre stage, delivering a spellbinding performance that held the audience spellbound.

NIST Berhampur Celebrates Van Mahotsav: with a Green Initiative



NIST Berhampur joined hands with the NIST NSS Club to celebrate Van Mahotsav, a festival dedicated to trees and the environment. The event welcomed distinguished personalities including Shri Pralayananda Sathapathi, Tehsildar of Kanisi, Shri Asim Kumar Panda, Additional SP, Shri Ankit Kumar Verma, IPS, and Shri Vivekananda Mahanta, IIC Golantra, who highlighted the vital role of trees in our ecosystem.

Club REC's Induction Program: Empowering the Next Genera- tion on Renewable Energy



Club REC recently conducted an induction program on renewable energy, aimed at enlightening junior students about the importance of sustainable energy sources and their proper utilization. The objective was clear: empower the next generation with practical knowledge to raise awareness about sustainable energy and foster a greener mindset.

The event, designed for first-year students, received an enthusiastic response, with a high turnout of eager participants. The program was not just informative but also engaging, providing hands-on insights into renewable energy solutions.

NSS Illuminate the Path to Healthy Vision



Recognizing the profound importance of sight, the dedicated volunteers of NIST's NSS team undertook a noble initiative. They organized a FREE EYE CHECKUP CAMP in collaboration with "RUBY EYE HOSPITAL," aiming to serve the community by preserving the precious gift of vision. With the unwavering support of around 100 NSS volunteers, the event unfolded on April 20, 2023, within the nurturing embrace of the NIST, Berhampur.

World Environment Day: A Call to Action for a Greener Planet



Every year on June 5th, more than 100 countries come together to celebrate World Environment Day. This global initiative, orchestrated by the United Nations Environment Programme (UNEP), serves as a powerful reminder of our collective responsibility to safeguard our environment. The focus of World Environment Day is to raise awareness about environmental conservation and take preventive measures to combat the looming threat of global warming.

International Yoga Day: Nurtur- ing Wellness Through Unity



Each year, on June 21st, the world comes together to celebrate International Yoga Day, a day dedicated to spreading awareness about the profound benefits of yoga and meditation. Yoga is a mind and body practice, that can build strength and flexibility. This ancient practice harmoniously combines physical postures, meditation, breath control, and ethical principles to promote the holistic well-being of individuals. The theme for this year, 'Yoga for Vasudhaivakatumakam' (One Earth Family), underscores the unity and interconnectedness of all.

EVENTS & CLUB ACTIVITIES

NIST hosted IDEATHON 1.0: The biggest hackathon ever



NIST hosted its biggest #hackathon ever - IDEATHON 1.0! Organized by the Google Developer Student Club, with lead organizer V Roshan Kumar Patro and a core team headed by Mentor, Dr. Sandipan Mallik on the eve of sankalp2k23. The event focused on startups funding and product building. The top 3 winning teams received cash prizes and a trophy, worth 50k seed funding opportunity. The Team NCARB-CAP (V. Someswar Rao, ECE, Aditya Kumar Sahu, ECE, & Rahul Kumar, IT) received the first prize. Team Cipher Force (Ashu Kumar, CSE) bagged the first runner up, and Team ECO-MINIONS (S. Sovan Kumar, ECE, Rohit Raj Padhi, ECE, Ayush Behera, EE) bagged the 2nd runner up.

Independence Day Celebration: Celebrating 76 Glorious Years of Freedom and Progress at NIST



With unwavering pride and a deep sense of patriotism, NIST celebrated the 76th Independence Day in grand style. The campus radiated with the spirit of freedom and progress as the NIST community came together in unity. Dr. M Suresh, the Ex-Principal(I/C), hoisted the national flag, a powerful symbol of our

enduring freedom. In his eloquent address, he urged fellow NISTians to embrace the responsibility of being exemplary citizens, highlighting the pivotal role each individual plays in upholding our democratic values. The day unfolded with stirring patriotic songs and graceful dances, showcasing the rich and diverse cultural tapestry of our nation. Inspirational speeches resonated with the audience, reigniting the flame of patriotism and reaffirming the profound significance of the day. As we celebrated 76 years of independence, the NIST community stood united, embodying the spirit of progress, unity, and dedication to our beloved nation.

Team NCS Hosted Drishyam



Team NCS organized the 'Drishyam' event on March 30-31, 2023. The event provided a platform to explore boundaries and enhance thinking skills. Meticulous support allowed immersion in the challenges.

The multi-level competition boosted participants' confidence and precision. A unique twist had participants questioning their thoughts, fostering learning and growth. "Drishyam" showcased mental fortitude and emphasized the importance of continuous cognitive challenges for personal growth. Participants expressed gratitude for the transformative experience, gaining confidence and problem-solving skills. Team NCS inspired attendees to embrace challenges for growth, leaving a lasting impact on participants' mental resilience.

Extravaganza Bash: A Stress- Relieving Delight for NISTian



NIST organized the "Extravaganza Bash" as part of its Foundation Day celebrations, promoting a stress-free environment for students. The event, designed to enhance mental well-being, offered a break from academic pressures through entertaining games and activities. With enthusiastic participation from around 120 students, the event showcased its universal appeal, contributing significantly to participants' mental well-being. The Extravaganza Bash not only served as a stress buster but also added excitement to the Foundation Day celebrations, reinforcing the Institute's commitment to nurturing a supportive learning environment.

Connect to Escape 3.0



On April 17, 2023, NIST Counselling Service organized "Connect to Escape 3.0," a dynamic event fostering a stress-free atmosphere and teamwork among first-year students. Under the theme "Unleash the inner child, just play and have fun," the event encouraged collaboration through engaging activities. Coordinated by dedicated team members, it emphasized not just entertainment but also instilled the spirit of teamwork.

HELPING BAHANAGA RAILWAY ACCIDENT VICTIMS: NIST offers Free Education to Children of the affected families

The train accident in Bahanaga, Balasore, was one of the deadliest in India's recent history, resulting in 288 fatalities, including 39 from Odisha. We commend the swift actions of the community members in saving lives and appreciate the efforts of the Odisha government, led by Chief



Minister Shri Naveen Patnaik, in protecting numerous individuals during this tragic incident.

NIST extends its condolences to the families of those who lost their lives in the accident.

NIST has a history of providing humanitarian services during difficult times, and now, they stepped forward to assist the train accident victims. The Balasore train accident was a devastating event that left many families grieving and countless children orphaned or without support.

In response to this tragedy, NIST Institute of Science and Technology (NIST) emerged as a beacon of hope and compassion under the visionary leadership of Dr. Sukant Mohapatra, the Founder Chairman of NIST.

Expressing his heartfelt condolences to the affected families, Dr. Mohapatra, the Founder Chairman of NIST, demonstrated his deep commitment to the well-being of the impacted children. With visionary leadership and a compassionate heart, NIST issued a press release on June 9, 2023, in Bhubneswar, Odisha, wherein he announced that NIST, recognized as the foremost educational institution in Odisha and the nation, would offer 100% tuition-fee waiver education in the area of Engineering, Management, or Science disciplines available at the NIST. What added to the remarkable nature of this generosity was the inclusion of a 100% academic fee waiver, ensuring that these talented individuals would not face any financial obstacles in pursuing their aspirations.

This generous act aims to support the children of train accident victims, nurturing their aspirations and symbolizing the transformative power of education. The community appreciates this support, instilling anticipation and optimism in these deserving youth.

This chapter in NIST's history reflects the institution's commitment to social responsibility and belief in the potential of every individual. The children of Balasore Train Accident victims have found not only an educational institution but also a caring family at NIST, where their dreams will flourish, and their futures will be shaped with compassion.



DEVASTATING RAILWAY INCIDENT AT BALASORE

NIST TO HELP CHILDREN OF THE AFFECTED FAMILIES

100% ACADEMICS FEE WAIVER

STUDENT SUCESS STORY

Prestigious Summer Internship at AERB



Sagar Patra, a bright graduate from the 2020 batch of BTech in Electrical Engineering, is one such remarkable talent who earned a prestigious summer internship opportunity at the revered Atomic Energy Regulatory Board under the Government of India. His journey from the classroom to the heart of India's nuclear energy sector was not just a testament to his dedication but also a beacon of hope for the nation's scientific prowess.

This summer internship has provided Sagar with an invaluable platform to bridge the gap between

A path from NIST to esteemed IISC

Congratulations

Mr. Harshit Saurabh

BTech ECE, 2019-2023 Batch

Selected to pursue integrated Ph.D
at Indian Institute of Science (IISc)
Bangalore (NIRF Rank -1)



Harshit Saurabh, BTech, ECE, 2023 Pass out batch, has been selected to pursue an integrated PhD at the prestigious Indian Institute of Science (IISc), Bangalore, which has secured the top spot in the NIRF ranking for 2023. Harshit's acceptance into IISc Bangalore is a true testament to his academic brilliance, unwavering dedication, and relentless hardwork. This incredible milestone showcases the remarkable efforts of our esteemed faculty members who have consistently nurtured and mentored students like Harshit, fostering an environment of academic excellence and intellectual growth.

Rohit Raj Padhi and S Sovan Kumar's Journey to Excellence at NTHU Taiwan



Rohit Raj Padhi and S Sovan Kumar, BTech ECE, 2019-23 Batch, has been selected to pursue their master's program at the Institute of Nanoengineering and Microsystems (iNEMS) of National Tsing Hua University (NTHU), Taiwan with Full Scholarship (Type A). NTHU is currently ranked #177 in the QS World University Rankings for 2023. Throughout their Undergraduate years, Rohit and Sovan demonstrated exceptional talent by working on cuttingedge projects. They have also authored/co-authored a journal article and a book chapter in the field of semiconductor devices. Additionally, they have achieved success in various Hackathons, earning prizes. They further enriched their educational experience through internships at esteemed institutions such as CSIR-IMMT, IISER Berhampur, IIT Roorkee and Woosong University, South Korea during their BTech studies.



LITERATURE, ART & PHOTOGRAPHY

Literature

Poetry

My Poem

Sea swallows sands
Landscape to my emotion
I comprehend the familiar
Wonder at Strangeness

In the ageless memory of Himalayan Terrains
She becomes my sky and
I become her witness Sun

I drench her with my thoughts
Gaze at her crystal beauty in innocence
Hide her in my embrace
Get possessive about her

She is my sweetheart, My Poem
My companion in silence and sound
Walk with me through the
Tinted windows of my imagination Every now and
then.

Dr. Sabyasachi Rath
Professor & Dean
College of Management & Liberal Arts

NIST

In Berhampur, where minds take flight, NIST Autonomous
shines with its light,
Dreams come alive, reaching new height, With knowledge's
torch, burning so bright.

In every corner, every space, Intelligence echoes, finding its
place, NIST stands tall, with a welcoming grace, A hub of
learning for the human race.

Projects and ideas, endless in store, Students aim high, always
wanting more, Unraveling mysteries, exploring the core, Their
love for science, a forever open door.

From coding to engineering's embrace, NIST's brilliance
shines, leaving a trace, In labs, they solve puzzles, complex
they face, Technology's limits, they continue to chase.

Guided by mentors, passion takes flame, NIST's impact is
more than just a name, A symbol of ambition, where goals
aim, To excel, innovate, and never be tame.

NIST is where dreams find their streams, Where intellect
flourishes and success gleams, Berhampur's pride, in reality's
seams, NIST shines as a guiding star in night's dreams.

Pramod Panda
Btech,3rd Year, Mechanical Engg.

The ebb and flow

Some days arrive
as frigid as vows unkept
Nights wrap us in warmth
where sweet kisses are swept.

Some awaiting moments
appear longer than forever
Some conflicts in our hearts
sweetly linger.

A connection that weathers
life's ebb and flow
With time it endures
and continues to grow.

Like aged wine, it mellows
with each passing year
In its embrace, we find solace
forever held dear...

Dr. Namrata Pattanayak
Assistant Professor
Department of Physics

THE DISGUISE

A little sigh,
To say we die.

I have chosen to be with you,
As long as there stars in the sky.

Though I little know,

Thou to guide me with your light,
So i'll make the correct decisions
And choose the path that are right.

And I sing amid despair and isolation
Of the chance to know you, to sing of me
Which are you, how could...

You see,

My Eyes are vary'd so,
To not look at my flaws.

What I thought of my greatest sacrifice for you,
But for you that should be my applause.

The serenity in your voice.

The mysterious air of hidden dreams.

The shy look of passion and,

The eyes that shone like sunbeams.

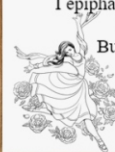
I epiphazined when that piece of life, you were not into.

I epiphazined when that piece of life, you were not into.

To all thou would just an ordinary guy.

But for me, You are my blessing in disguise.

Rani Nayak
Btech / ECE
2nd year



LITERATURE, ART & PHOTOGRAPHY

Art & Photography



D CHANDAN PATRO, BRANCH - CST (2nd Year)



MOHAMMAD EHSAN, BRANCH - CSE (2nd Year)



ALUMNI SPEAK

Rashmirekha Kalyani Mishra

B. Tech (Electronics & Communication Engineering)

Batch: 2014

Current Engagement: PhD student at NIT, Rourkela

Current Location: NIT, Rourkela



Rashmirekha Kalyani Mishra is a poet, writer, research student and art-loving person. She has a passion for painting and writing since her childhood. She was awarded many prizes in Art, Short Story Writing, and paintings in the inter-state competitions. Her major contributions are in the field of poetry and quotes. Her writings mainly focus on day to day

human emotions and behaviors. She is being felicitated with Star Alumni Award for her contribution in the field of Art & culture at NIST campus on the occasion of 27th Foundation Day.

NIST Chronicle family feel proud to have a candid discussion with her regarding, how was her life at campus on that day.

NIST Chronicle: What is your story related to joining NIST

Rashmirekha: My father, Prof Rabindra Kishore Mishra often visited NIST as a chief guest, presented talks, conducted seminars and many more. So I used to accompany him since childhood. As a kid, the greenery of NIST, the dogs and aquarium used to attract me the most. After completing my 12th, I wanted to continue my studies in Berhampur only as we were living here for more than 20 years now. So while opting for Engineering Colleges, I have selected NIST only, no other college. With Jagannath's blessings, I got into ECE and spent best 4 years of my student life.

NIST Chronicle: Can you share one remarkable memory with friends that you made while you were at NIST*

Rashmirekha: There are thousands of memories we have at NIST. Be it the rock garden, Amulparlour, Galleria, Atrium, Octagon, LHC, Tifac or Core. When I was in 1st semester, a few students have bunked a session. After that class we had mechanical workshop. The students who bunked the session called their friends and asked to bring their bag. So the students dropped the bags from the 4th floor and it made a huge sound while touching the ground.

That time, Mihir Hota sir with a few other teachers were passing by and they thought someone has committed suicide by jumping down and it created panic atmosphere for a few seconds, though later everyone laughed at it.

NIST Chronicle: Do you recall any location at NIST that reminds you of getting motivated or changing your course of action?

Rashmirekha: TIFAC core is famous for research. Students who get an opportunity to work at any lab present at TIFAC core have a bright future in the domain of research. It always motivated many of us to focus more on our goals, work hard and smart to achieve it because the taste of success is really sweet.

NIST Chronicle: Among your Faculty Members, Who were the key influencers (if any) and why?*

Rashmirekha: I am deeply obliged and grateful to each of my faculty members for shaping my future. Swadhin Mishra sir, Rajesh Kumar Das (RKD) sir and Rita Bhattacharjee ma'am have supported me a lot during my college life.

Swadhin Sir was not only my project guide but also was my mentor. He supported me through every thick and thin. While completing the project work sometimes we used to miss the bus seats so sir dropped us home and ensured our safety. For me and my project partner Bhagyashree, sir is a father figure. RKD sir was very humble and down to earth. Due to my sickness I couldn't attend a few sessions. I used to go to RKD sir for doubt clearance and he never denied it. Rita ma'am was student counselor and I was a student guide under her. I used to share all my personal, professional and academic worries with her and she always had a solution to each of those worries.

NIST Chronicle: Can you name at least two of your batchmates, who are your best friends? Please share about them.*

Rashmirekha: Bhagyashree, Simran, Sibani, Balgopal, Yoganidhi, Anshuman, Jaykishan, Pradyumna, Sabya, Ujjwal ; all of them are my best friends. Bhagyashree, Sibani are my friends since childhood, we went to the same school and then the same college.

Bhagyashree is working at Accenture, Jay is working with PWC, Balgopal is working at SAMSUNG, Pradyumna is an Entrepreneur and he is having business of fisheries and dairy products. Sabya and Yoga are working at Infosys. Anshuman is a business person now. Simran is married and settled at the USA and Sibani is married and working at an MNC in Bangalore.



ALUMNI SPEAK

NIST Chronicle: If a student of +2 or high school would seek your advice on making a career, what would be your advice? *

Rashmirekha: There is no shortcut to success. Work hard, work smart and achieve your dreams. Do not pursue a career under pressure, but discuss about your dreams with your parents and teachers. In the era of globalisation and internet scopes are vast. Explore them and be the best in what you do.

NIST Chronicle: Let's say we have invented time machine. And you have been authorized to do a time travel (round trip) once. What would be that, which you would like to change if possible?

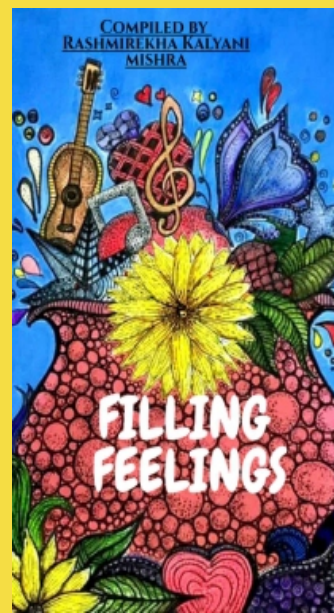
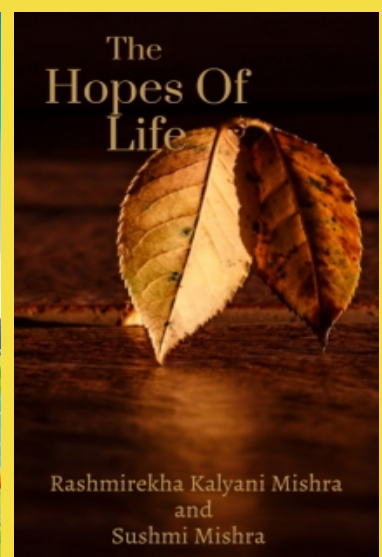
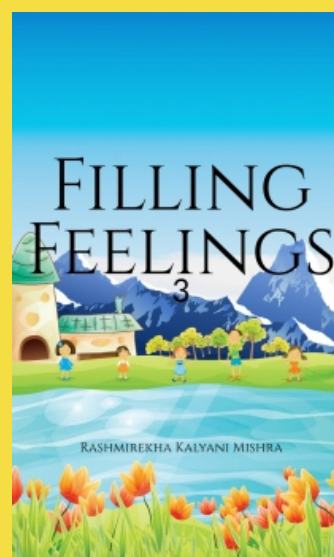
Rashmirekha: On June 28, 2018 my father met with a road accident and is quadriplegic (neck-down paralysis) since then. If possible I'll change this.

NIST Chronicle: What is your take on earning? Desk job, field job, research, entrepreneurship, or even freelancing: what works best?

Rashmirekha: In today's world, single source of earning is not enough because expenditure is almost equal to earning and hence saving becomes zero. So initially it is important to have a job so that one can have enough money saved to start his/her own business. Job will assure that at the end of the month one won't starve. Then gradually start a business, do freelancing whichever field one wants to go for. Coming to research, it'll always pay for what you do. You'll be paid for studying, you'll be paid to teach and you'll be paid to find something new. So if one is really interested in research, it's gaining knowledge and being paid for it.

NIST Chronicle: Any message that you would like to give to the new students.

Rashmirekha: Dear Students, you have got one of the best platforms to shape your future. Utilize the opportunities you'll be getting at NIST and after 4 years, you'll feel an impactful change within yourself. Being an Alumni, I can definitely say that I have seen students who were under confident, were unable to focus on studies or understand the basics while they were in the first semester. But with the help of teachers, counseling team, and the healthy college atmosphere, they all have grown hackathon, projects, competitions



NIST IN NEWS

ବ୍ରହ୍ମପୁର ଧର୍ମପୁର ପିଲାମାନଙ୍କୁ ମାଗଣା ପାଠପଢ଼ା ସୁଯୋଗ

ନିଷ୍ଠାକରଣ, ଅପ, ସାକନ୍, ଆଣ୍ଡ ଟେକ୍ନୋଲୋଜି ପ୍ରତିଷ୍ଠାନ ପକ୍ଷରୁ ବଳେଶ୍ଵର ଜିଲ୍ଲା ପ୍ରତିଷ୍ଠା ପାଠିକ ପିଲାମାନଙ୍କୁ ବ୍ରହ୍ମପୁର ଧର୍ମପୁର ପିଲାମାନଙ୍କୁ ମାଗଣା ପାଠପଢ଼ା ସୁଯୋଗ ପ୍ରଦାନ କରାଯାଇଛି । ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନ ପକ୍ଷରୁ ଅଧିକ ବିବରଣୀ ପ୍ରଦାନ କରାଯିବ ଏବଂ ସେ ଉପକ୍ରମରେ ପାଠିକ ପିଲାମାନଙ୍କୁ ମାଗଣାରେ ପାଠପଢ଼ା କରିବା ପାଇଁ ପଦକ୍ଷେପ ଗ୍ରହଣ କରାଯାଇଛି ।

ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନର ପ୍ରତିଷ୍ଠା

ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନର ପ୍ରତିଷ୍ଠା ପାଇଁ ପିଲାମାନଙ୍କୁ ମାଗଣା ପାଠପଢ଼ା ସୁଯୋଗ ପ୍ରଦାନ କରାଯାଇଛି । ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନ ପକ୍ଷରୁ ଅଧିକ ବିବରଣୀ ପ୍ରଦାନ କରାଯିବ ଏବଂ ସେ ଉପକ୍ରମରେ ପାଠିକ ପିଲାମାନଙ୍କୁ ମାଗଣାରେ ପାଠପଢ଼ା କରିବା ପାଇଁ ପଦକ୍ଷେପ ଗ୍ରହଣ କରାଯାଇଛି ।



NIST adopts OUPP to boost job opportunities

students in Odisha. There was an overwhelming response with over 100 enthusiastic students registering for the written test and interview.

At the core of offering 13 students selected at NIST with a life-changing opportunity, a free 6-month training programme like JAVA Full Stack and Data Analytics. This intensive training



ନିଷ୍ଠା ଏନ୍-ଏସ୍-ଏସ୍ ର ଖାଦ୍ୟ, ବସ୍ତ୍ର ବଣ୍ଟନ



ନିଷ୍ଠା ବୈଷୟିକ ଶିକ୍ଷାନୁଷ୍ଠାନରେ ଚଣ୍ଡୁ ପରୀକ୍ଷା ଶିବିର



NIST-Berhampur to Provide Free Education for Children of Balasore Train Accident Victims

Children of Balasore Train Accident Victims

ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନ ପକ୍ଷରୁ ବଳେଶ୍ଵର ଜିଲ୍ଲାରେ ଚଣ୍ଡୁ ପରୀକ୍ଷା ଶିବିର ଅନୁଷ୍ଠାନ କରାଯାଇଛି । ନିଷ୍ଠାକରଣ ପ୍ରତିଷ୍ଠାନ ପକ୍ଷରୁ ଅଧିକ ବିବରଣୀ ପ୍ରଦାନ କରାଯିବ ଏବଂ ସେ ଉପକ୍ରମରେ ପାଠିକ ପିଲାମାନଙ୍କୁ ମାଗଣାରେ ପାଠପଢ଼ା କରିବା ପାଇଁ ପଦକ୍ଷେପ ଗ୍ରହଣ କରାଯାଇଛି ।

ନିଷ୍ଠାରେ ଅନ୍ତର୍ଜାତୀୟ ଉତ୍ତରୀନ ବାର୍ଷିକ କର୍ମଶାଳା



ନିଷ୍ଠାରେ ଦକ୍ଷତା ବିକାଶ ଓ ନିଯୁକ୍ତି କାର୍ଯ୍ୟକ୍ରମ



ନିଷ୍ଠାରେ ବନମହୋତ୍ସବ



'ବୈଦିକ ଜ୍ଞାନ ସମ୍ପଦ ହିଁ ଭାରତକୁ ବିଶ୍ଵ ବିଜୟୀ କରାଇପାରିବ'



ନିଷ୍ଠାରେ ବୈଷୟିକ ଶିକ୍ଷା କର୍ମଶାଳା ଉଦ୍ଘାଟିତ



'ନିଷ୍ଠା'ରେ ମହିଳା ଦିବସ



GRAB YOUR COPY NOW!



SCAN ME

nist.edu/chronicle/



Officially documenting the **life** of current students at campus
and reviving the campus **memories** for alumni.