

NIST <u>e</u> NEWS



F .~~

(j)*

START UP & ENTREPRENEURSHIP

An entrepreneur saves one and creates more jobs for others & adds value with breakthrough ideas to compete with the traditional market through startups.

 \langle



CELEBRATIONS

NIST celebrated its 26th Foundation Day. It was the day to remember, cherish, recognize and reward the achievers.





" Learn to Learn by Yourself " Mr.Manas Kar (Big Data Architect) Waterloo,Canada



NIST Institute of Science and Technology (Autonomous) Institute Park, Pallur Hills, Berhampur, Odisha India, Pin:761008

CAMPUS TOUR

nist



PC: Foto Folks, Sibaram Sahu, Vibek Bhardwaj & Prachi Raj Singh

CONTENTS STAR[®] MESSAGE CORNER COLL 03 NIS Message from Chairman Message from Principal con SCIE LETTER FROM EDITORS 05 MAN **Board of Editors** Letter from Editors Ent Bha Mr FEATURE STORY 06 Start-up & Entrepreneurship EVEN NIST Chronicle Survey Interviews NIS Mr. A. Mohanty, Aspiring Entrepreneur Ind Dr. G. S. Beriha, Budding Entrepreneur Mr. S. K. Gantayat, Entrepreneur ESI ΑI NC FOUNDATION DAY 11 Fre Pos Introduction Old Awards Bis Message From Organizing Head Tal NEW FACES OF NIST FAMILY LITEF 14 Lite Academic Art Placement Pho Incubation Administration Food & Beverage ALUN **INNOVATION & RESEARCH** Mr. 16 B.Te **FRONTIER** Cur Ph.D. award Cur **Research Publication** Faculty Achievement NIST Internship Hackathon WORKSHOP, SEMINAR & TALK 18 A Talk on "Distributed Control of a Microgrid" A Lecture by Prof. Durgamadhab Misra, NJIT, USA Guest Lecture by Dr. Tarakanta Nayak, IIT Bhubaneswar National Workshop on "Application of Econometrics tools in Social Sciences

and Management Research"

T-UP AND INDUSTRY ABORATION	19
T builds capacity to assemble nmercial PCBs	
NCE / ENGINEERING / AGEMENT	19
trepreneurs/Startups: "Apo Dipo ava (Be a light unto yourself)" by . Biswajit Padhy (MBA Second Year)	
ITS & CLUB ACTIVITIES	20
ST Research Cell Project Showcase lustrial visit to NALCO C Awareness camp Discussion on 5G Network C Combined Annual Training Camp ee Eye Checkup Camp shan Abhiyan d Age home visit by NIST student wakarma Puja at Campus kshak 2022	
RATURE, ART & PHOTOGRAPHY	22
erature t otography	
INI SPEAK	24
. Manas Kar ech (Computer Science), Batch: 1999 rent engagement: Bigdata Architect rent Location: Waterloo, Canada	
IN NEWS	25

Page 2

MESSAGE FROM THE CHAIRMAN

It is a great pleasure to know that this issue of NIST Chronicle is focused on the theme "Startup and Entrepreneurship". As part of NIST's "Student First" policy, in addition to guaranteeing academic and research excellence for the students and their overall personal development, we constantly work toward a clear career path for our students, including job placement, higher education in India and abroad, and entrepreneurship. Innovation, industry collaboration, startup, and entrepreneurship are one of the foundational charters of the institute and it is in NIST's DNA. NIST has partnerships and collaborations with numerous industries and organizations (e.g., Marquee Semiconductor, NHAI, Parkland Solar, Sankalp Semiconductor, ESSCI, Maven Silicon, Pipli, and others) in India and abroad, with some active projects being carried out on-campus with our industry partners.

Over a dozen successful startups have been promoted by NIST alumni, with some still operating from the NIST campus (e.g., Protionix Technology). The Ministry of Education, Government of India, ranked NIST as a performer in the Atal Ranking of Institutions on Innovation Achievement (ARIIA) in 2021. Above, we briefly highlight the focus and accomplishments of NIST in the areas of innovation, industry collaboration, and entrepreneurship.

On September 18th, NIST celebrated its 26th anniversary, honoring its rich heritage, legacy, and vision. Shri Chandra Sekhar Sahu, Hon'ble Member of Parliament, and Shri Bikram Kumar Panda, Hon'ble Member of the Odisha Legislative Assembly graced the occasion as chief guest and guest of honour respectievly, while Dr. Satya P. Das, University of South Florida, USA, and Dr. LaxmiKanta Tripathy, Regional Director of Education, were chief speakers during the inauguration ceremony.

The full-day event featured seminars, exhibitions of products, and prototypes developed by start-ups, entrepreneurship, and industry collaboration. The program concluded with an award ceremony followed by a cultural fest by the NIST fraternity. My sincere thanks to the NIST fraternity, including faculty, staff, alumni, and student for a wonderful celebration of the 26th Foundation Day of NIST. Gold and silver medals were given to the students for their outstanding academic performance.

Colonel Nikhil Kumar (2001- 2005) received the distinguished alumni award, along with Mrs. Sunita Kumari, Mr. Swastik Choudhury, and Mrs. Sonali Satapathy, who were recognized as star alumni



for their outstanding achievements and groundbreaking contributions to the fields of film-making, public service, entrepreneurship, and service to the country.

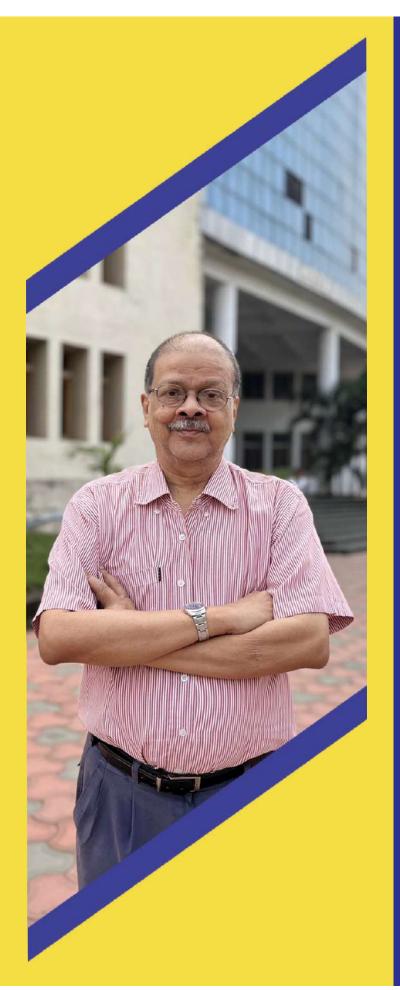
We congratulate our alumni on their remarkable accomplishments. We are proud of you.

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

Bonopatra

Dr. Sukant K. Mohapatra

MESSAGE FROM THE PRINCIPAL



In today's dynamic world, where new technological innovations emerge at every turn, NIST provides numerous opportunities for students to innovate, think critically, and lead the learning process. NIST provides the foundation for viewing the world as an infinite space with endless opportunities to shine. The Institute is dedicated to a student's overall development, which includes academic knowledge, intellectual curiosity, physical endurance, social skills, and a special emphasis on self-discovery.

In about 26 years, our Institute, like a sapling sprouting with its branches, has flourished, promoting quality and value-based education. The growth of the sapling has been properly nurtured by the administrators, teaching faculties, students, non-teaching staff, and parents. By focusing on the Student-First policy, we are trying to mold our students into "nation builders". We are sure that the seeds of wisdom are sown today in the form of students and will reap tomorrow in the form of responsible citizens. With carrying a long and rewarding history of achievements in imparting education and research, our Institute continuously evolving with confidence, pride, and enthusiasm.

I laud the relentless efforts of our faculties for giving their best to bring out the finest in each student. But I would exhort the students to always be modest, humble, and disciplined while being ready to expand the horizons of their knowledge and skills by dreaming big and working hard. I would also like to put on record the incessant assistance and cooperation of all the nonteaching staff that help me run this Institution smoothly.

Last and by no means least, a special thanks to all the parents for putting their faith and confidence in us. I wish you all good luck, and let's work harder to achieve bigger and better milestones in the coming years.

With best wishes and blessings for the upcoming session.

Priyadarshi Lipalky

Dr. Priyadarshi Tripathy

LETTER FROM THE EDITORS

Chief Editor:

• Dr. Ratikanta Nayak

Board of Editors:

- Dr. Sandipan Mallik
- Mrs. Minakhi Dash
- Dr. Namrata Pattanayak
- Dr. Sushanta Kumar Sahu
- Mr. Abhisikta Mishra

Student Desk:

- Mr. Sambit Nayak
- Mr. S. Digvijay Patro
- Mr. Aayush
- Mr. Debasish Mohapatro
- Mr. Addhyan Das
- Mr. Sibaram Sahu

epublication@nist.edu
 7205326478/7205336478
 9777146478

TheNISTian
 TheNISTian
 TheNISTian
 TheNISTian
 TheNISTian

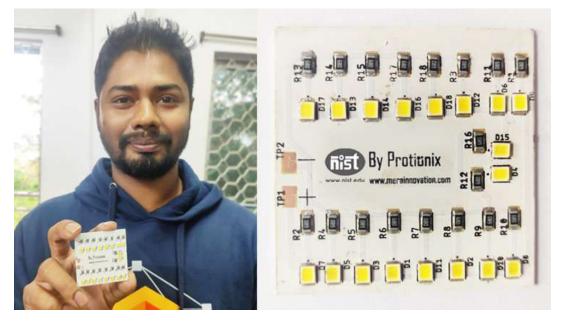
Address:

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



Courage, Confidence and Collective leadership is the key mantras for a startup founder. A startup founder always eats, drinks and plays with his ideas. There are many layers of process/phases one has to cross to become a successful entrepreneur. The major obstacle which generally restrain back a person with middle class background is the financial constraint. Now a fresh graduate with high paid offer letter in his hand is considered as the hall mark of his success. Daring, Dreaming, Realizing, Imagining, Prototyping & then product are the several stages of grooming idea to market ready product.

Unfortunately, many ideas die in their infant stage daily in India. If you don't have strong belief on your ideas then you can't leave everything for it. A startup founder has to become mad behind his ideas unless he/she can't not run behind it. It is like making something tangible out of nothing. Whatever man has made the marvels around us, oneday those were just the ideas and now it is becoming reality. The category of people those were interested to create/design something for society is like a mini god. It is a wrong belief that school dropout or college dropout have excelled in Startup, actually any dreamer or passionate entrepreneur can do it. The statistics show that most of the startup founder in India in past 10 years are above the age of 40 years. Startups are the most fascinating form of business because it provide matchless prospect for global influence and growth, an opportunity that many people could only dream about a few decades ago. Startup has the vital role for shaping the economy of any country as it creates new jobs; these are flexible and can adopt the changes very fast as compared to mammoth companies. It gives freedom to its employees to express their ideas to boosting product development, enhancing service quality or marketing ideas. Startup is not always starting for moving up, it may come down, idea may click or may fail, still this romantic experience teaches many things within a few years that any employee/owner of any big corporate might not experience in his life time.



NIST Fab-Lab rolls out first in-house manufactured commercial SMD-PCB





FEATURE STORY

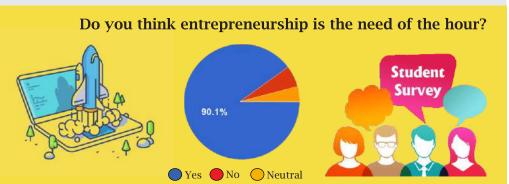
Start-up & Entrepreneurship

An entrepreneur saves one, creates more jobs for others & adds value with breakthrough ideas to compete with the traditional market through startups. A startup may be a segment-first which might not exist beforehand like OLA, OYO, or Paytm. Capital investment mobilizes public wealth and allows people to get benefit from the success of entrepreneurs and growing businesses. India, from being known as a country of a cheap labor workforce, the country now has a 112 million strong youth in the age bracket of 20-24 who are passionate to take on the challenges and change the face of the nation. It is visible in popular TV shows like SHARK TANK INDIA. With the push of flagship programs like Startup India, we are catapulting as the manufacturer of the best products and services. On the contrary, the romantic and fancy ideas for a startup are not yet lucrative for graduates of middleclass backgrounds with job aspirations.

The obligation of study loans and family responsibilities clip their thoughts and ideas and they are forced to become commodities in the job market, getting sold per hour basis.



In this context, "NIST Chronicle" wants to explore students' views on entrepreneurship.



We had a candid discussion with Entrepreneurs of different categories for a better clarity on this issues & to explore the unravelled path of their journey. In this regard, we took the interview of our current student Mr.Arup Mohanty:an Aspiring Entrepreneur, Dr. Gouri Shankar Beriha: Budding Entrepreneur & Mr.Suraj Gantayat: Entrepreneur.



Aspiring Entrepreneur

Mr. Arup Mohanty

B.Tech 3rd year (Computer Science & Engineering)

Researcher | Innovator | Student | Founder of ARUPAI | Ex-Mitacs GRI Intern 2022 at York University | Part of UX Researcher at Google

Arup Mohanty is an Indian Researcher & founder of a startup "ARUPAI". Arup's primary area of research is in domain of Data Science, Data Analytics And Visualisation, Climate Change studies. Arup is a 2022 MITACS Canada GRI Scholar which is one of the world's most competitive Research Internship. ISET winner at Singapore. He is also a invited speaker on Big Data Analytics and Application at University of Oxford.Google Scholar and published research paper in TENSYMP-2021 conference Jeju_Do, South Korea. The budding researcher, innovator & entrepreneur has visited many countries and met many personalities in startup eco system. He has garnered the first hand experience of Startup. It is interesting to know what he thinks about Start up & entrepreneurship.

Aspiring Entrepreneur

FEATURE STORY

1) Do you feel a high salary job is a minor option near a big Idea of start-up?

Ans- I feel there are two answers to this question, one may be to go for a high salary job as per his/her skills set to get some valuable experience. As this may be a good option to get a good corporate exposure. On the other way, having a big Start- Up idea is a more challenging and thriving option to follow as this needs a strong belief, best team and technology. It depends a lot upon the performance and market - capture to make a company successful. So, I think high salary job is a minor option near a big Idea of start-up only if idea has a enough potential to solve the problem.

2) Who should first impose faith on the idea of a start-up founder?

Ans- Well, the person who is a so-called investor, generally imposing faith on your idea, has a strong belief in your skills, values required for a founder to successfully run a company. The Investor should have strong belief on founder's skill, ability and courage to run the start-up.

3) In your view, what are the factors that are conducive to produce entrepreneurs?

Ans- Some factors that are conducive to producing entrepreneurs are- 1) Government support for entrepreneurs. 2) seed-funding to more good startup ideas. 3) Open access to technology 4) easy rules and policies from the government to start a company.

4) Whether the existence of Government support machinery is imperative for the success of startups?

Ans- Yes, the existence of Government support machinery is imperative for the success of startups in one or more ways. As this helps budding entrepreneurs to get started with the required tools and supporting machinery necessary for the success of startups.

5) What are the best states and cities to have a startup?

Ans - I think the best states and cities to have a startup are the places where the majority percentage of working class people are available. Example-tier-1 cities including Bangalore (Silicon valley of India), Hyderabad (Techhub),Delhi, etc. are the best cities to start a startup.

6) Is entrepreneurship contagious? Were you inspired by someone?

Ans- Well, It depends from one person to another. Maybe one person who is good in managing the stuff well in the right manner to make money can choose entrepreneurship. For example Elon Musk, the founder of SpaceX, Tesla, and Starlink once turned his room into a club to pay his rent. So, You choose entrepreneurship not entrepreneurship to you.

While someone may be interested in working in some tech companies or simply follow a leader. Yes, I inspired a lot from Bill Gates life and how he started Microsoft and became wealthiest person on earth from 1997- 2017 except from 2010 to 2013. I will advise everyone to read his all time best selling book "Business at Speed of Thought".

7) It is a general perception that a B.Tech or MBA degree is the right starting point for some one to have a startup. Is it true?

Ans- I think it is true, but in different aspects for B.Tech or MBA degree holders. Many of them are not exposed to practical skills and have essential ingredients required to start a startUp, for them I don't think this is not the right starting point for them. In the other side, Some guys who find a way to solve some real world problems while pursuing B.Tech or MBA are tend to have a good starting point to start a startup.

8) What is the situation regarding the availability of skilled manpower to execute your ideas? Do you feel that there should be changes to curricula in higher education?

Ans-As per the current situation about 75-80% of engineers passing-out of colleges are inefficient or are not skilled enough to produce an efficient result which are required by the big tech companies. Yes, I do feel that there should be changes to current curricula in higher education. Curricula should be designed in parallel to industry requirements and more skill oriented rather than just theoretical concepts.

9) What is your advice to aspiring women entrepreneurs?

Ans- I will advise aspiring women entrepreneurs that there is a lot of space and support for women entrepreneurs these days. As I have seen many successful women entrepreneurs like Vinita Singh (Founder of Sugar Cosmetic), Upsana Thakur (Cofounder of Mobikwik), Falguni Nayar (Founder of Nykaa).

So, all women has equal opportunity as men in the field of entrepreneurship and can start something to do better for a society.

FEATURE STORY



Budding Entrepreneur

Dr. Gouri Shakar Beriha Chief Operating Officer (Vertox Labs Private Limited) Alumni: NIT Rourkela

Dr. Gouri Shakar Beriha (PhD) is the COO of Vertox Labs Private Limited which is manufacturing anemia detection device targeted at the pregnant ladies especially in the rural areas. He was interviewed by Ms. Swarniva Bhoi, an MSc Physics student at NIST. He believes that, it is the right time now for students of IITs, NITs or other institutes to come forward to make a Startup which can solve the real world problems through their breakthrough ideas.

1) Welcome Dr. Gouri Shankar Beriha, COO of Vertox Labs.Welcome to the Start-up issue. Please introduce yourself for our readers.

Ans- Currently I am a faculty member at KISS Deemed to be University, BBSR. I am a director in a startup company-VertoxLabs Private Limited. My company is into medical devices and water body rejuvenation.

2) The reason we are interacting on this platform is that you are an entrepreneur. What is your current interest? Which product or service you are working on now?

Ans- My current interest is developing the medical instruments for the pregnant ladies and pediatric use. It is a non-invasive device for detection of five blood parameters in pregnant ladies, mostly to minimize anemia. In urban areas the testing facilities are easily accessible, there is less problem. But the in the rural area, the density of testing infrastructure is less. The Govt is lacking similar reach in the rural area. We are hopeful that the device will be helpful in the success of the Anemia Mukt Bharat scheme.

3) Whether your decision to become an entrepreneur was instant, or you took some time thinking about it before jumping in?

Ans- Basically, the problem I am tackling is generic. You see, whoever has invented something, has taken inspiration from nature. I faced it right within my family. My wife suffered from anemia and faced some issues. I did a thorough search and found that certain blood related parameters are inter-related. If we could track them, then we could accurately predict and prevent anemia.

4) What is the right background and situation to start something. What educational qualification or family background?

Ans- According to me, there is no such right background or situation. One can start at any age. May be a teenager can also start. You may take the case of Ritesh Agrawal starting OYO at 19 years. You see KFC being started at the age of 65 years. Age is not a bar, educational qualification is not a bar, family background is also not a bar to start a business activity.

5) After the 2008 great recession, we are again scheduled to face a great recession as per reports. Then it also means there will be a lot of people who would be starting something of their own. What do you thing are the right triggers to start a venture?

Ans- So, you know that the whole world was suffering in 2008-2009, and that was the global recession. It was when the Lehmann Brothers closed down. Not only did it affect the banking sector or services sector, it affected the product-based organizations too. And this also affected the small-scale industries. But now, this is not the recession time exactly. The companies are trying to restructure and stand up on their own. Talking about the right triggers to start, I think this is the right time for the students of the IITs, NITs or other institutes to make start-up, it would be an adventure. The Government is already funding you if you have a startup company. There are lot of funding agencies, financial institutions are there. Startup companies pledge their share in the form of optional converted preferential share. Even though they may not have a formally registered firm, they can still start. If you think this in term of 2008, 2010 or 2015, then the decision to start a firm was not very much feasible because of the initial funding issues. Now the situation has changed. Even the students are getting fund. This is the right time to start a venture.

6) Sir,You have an MBA and PhD. Do you think, that a person like you, who started something after completing PhD, and 35+ age, is a good role model?

Ans- Yes, I am basically a science graduate. I did my MBA. I did PhD at NIT Rourkela. After completion of PhD, I joined as a faculty. After that only I started this thing. My age was already more than 35. Whether you have a PhD or

nist

FEATURE STORY

Budding Entrepreneur

MBA or do not have an MBA, not an engineer does not matter. An academically bright student can start a company, a mediocre student can also have a startup with equal success. So, education, age, PhD, MBA are no bars. It all depends on the interest and passion.

7) What is your message to the students? What characteristics do they need to have in them to become entrepreneurs?

Ans- Yes, my message is all students should give an attempt to start their own enterprise. Now the job market will squeeze a bit. However, the job market is not the only source from where you can earn a living. Rather you should stand yourself and employ some people. Be an entrepreneur. Be a role model in your circle. Start early.About the characteristics, a student should have a unique idea; fire and perseverance to implement the idea, modify if needed. If you have a group of like-minded friends to support, then it is excellent. In startup, there are lot of challenges to work on. The main challenge is hiring people. In startups, you are getting a seed fund. That is also not very easy. The funding agency will make sure you have a unique idea before releasing fund. There is lot of competition among startups, competition is everywhere. Your invention should be unique in nature, then only someone will invest. If you get 30 Lac or 40Lac from some agency, it is not a big amount. That means if you are hiring 10 persons, you can pay merely 10k-15k at the beginning, you still have to keep a keen watch on how they perform. Because the amount will be spent within a very short span. You need to hire with quality and quantity.

8) How should one take failure in startup? Quit, pivot or restart?

Ans - In case there is a failure, it can be due to various reasons. Sit with your team and try to find the root cause. If you can't do it (often due to bias), then take help of someone else for a honest review. If it is something you can work on, do that, it is fine to fail a few times. If it is related to your persona, or execution style, then try to delegate the task and authority to another person better at it. If it is related to product placement or offering, try to pivot, try to rework the design.

Quit, only if you don't enjoy it. For all other reasons, keep calm and give another attempt. It is an interesting world. You have to manage people, aspirations, deadlines, compliances, market expectations, finance and what not. You will enjoy.

Thank you, Gouri Shankar Sir, for your time and sharing your experience with us. I hope, it will stoke the fire in the students to become entrepreneurs.



Entrepreneur

Mr. Suraj Kumar Gantayat Entrepreneur, Investor & Conservationist Alumni: NIT Trichy, IIT Bombay & IIM Sambalpur

Advi Showcase Id Pvt. I	ea Sharing	Founder Restrokart	Founder and CEO LIVCEL (Living Cell Venture)	Co Founder SS Ruraltake Services Pvt. Ltd.	
Head of Te FerroTec Pvt. 1	h India	Core Team Member DiGyan	Associate 2Gud Basic	Investor/Producer AngelBee Medias Pvt. Ltd.	
CH Edprosy		Co Founder Trakstar Product Innovations	CEO Thita App	Leader MoSahay	
Group Executive Manager (Chairman's Office) Rarean Fluid-Tec		Startup Head and M Odisha Corporate Fou			

The startup is a game of courage, conviction, and perseverance. Your success is testimony to the fact that you have mastered in it. The younger generation can always learn from your journey. The founder and advisor of dozens of startups, Mr. Suraj Kumar Gantayat have learned 360° angles of a series of business starting from a traditional chalk-making company to a high-tech business "Theta APP" company. He has failed several times and has learned the most valuable experience of how to defeat the defeats. He left his startup and business at Mumbai and shifted to Bhubaneswar with strong determination to make Odisha the future manufacturing hub. NIST CHRONICLE is proud to have such elite personalities for our "START-UP & ENTREPRENEURSHIP" edition. Hope our readers will be inspired from this chat...

Entrepreneur

FEATURE STORY

1) Many startups are mushrooming in India & why most of them couldn't able to celebrate their second anniversary even.

Ans- The major reason for the failure of a startup is: 1.Founder's role generally not defined on day one on an agreement paper during the initial days of the company. Hence several conflicts arise later, which leads to failure. 2.Many start-ups focus much on scaling up rather than on profitability, hence it dies without revenue at the end. 3.Cash flow should be maintained, it is like blood for a living being. Even no revenue with good cash flow is fine but high revenue with limited cash flow is dangerous.

2) Have you ever repented to choose this path?

Ans- Never, It is a high-risk and high-profit game. I love to play it.

3) In your view, what are the factors, which should be taken care of to create more entrepreneurs?

Ans- A community ecosystem is essential to create more entrepreneurs. The success of more startups also attracts youth to take a chance in this risky area. The addition of more startup in the unicorn status will definitely encourage people to become entrepreneurs. Start-ups are very much different from traditional businesses. It has new kinds of challenges, new ideas, and interrupter to the traditional product list, and fast technology, hence govt should be proactive in policymaking for these new tech businesses so that the entrepreneur should not face problems in the mid of their business for the policy issue.

4. Whether the existing government support is imperative for the success of a startup?

Ans- No doubt govt is promoting the start-up culture, still, many govt babus are sitting in the office for many decades ago, and they think making a business means doing corruption. The mind set of govt officers should change. They should be ready to accept the disruptive ideas and technology of any entrepreneur. South Korea was once occupied by Japan, but due to the govt support the traditional business houses have become global players in electronics and controlling the electronics industry such as LG, SAMSUNG etc. Hence govt should promote the new age entrepreneur to scale up the existing traditional businesses for the international market. India is an aspirational country, and the economy will grow definitely in the coming days, it might be after 10 years or it may take 20 years. If govt will support, it may be achieved within 5 years.

5) What are the best states and cities to have a startup?

Ans- Different Startups need different place for its launching pad. Tech businesses need high-tech people and this category prefers to stay in metro cities, hence tech startups prefer to start at metro cities Mumbai, Delhi, and Banglore. Manufacturing-based startups prefer 2nd tier cities of India like Bhubaneswar, Indore, Gandhinagar, and Lucknow for their low cost of living as comparatively to the metro. It does not need high-tech people, once the process is optimized, then it may come to auto run condition.

6) Is entrepreneurship contagious? Were you inspired by someone?

Ans- Yes, it is contagious. I was inspired by my grandfather Mr. Raghunath Patro, who created a business from zero to 200 Cr in 1960 in Berhampur, Odisha.

7) What is the situation regarding the availability of skilled manpower to execute your ideas? Do you feel that there should be changes to curricula in higher education?

Ans- There is a lack of availability of skilled manpower in Odisha, our youth don't have the basic skills needed for any business, therefore I would suggest govt. to include at least skills those are needed for a manufacturing company like (Accounting, Fitter, Plumbing, Electrician & carpentry, etc.) from 5^{th} to 10^{th} class in school education.

8) It is a general perception that a B.Tech or MBA degree is the right starting point for someone to have a startup. Is it true?

Ans - It is not true but it will definitely help to start any new business. Also, it is a myth that college dropout only makes miracles in business. Never leave education for the sake of business.

9) What is your advice to aspiring women entrepreneurs?

Ans- Women are the biggest risk taker because the family never depends upon their income. If she fails, it may not hamper the life of their family members. Women always prefer to take a calculative risk and take the right decision as compared to men. They are caring and easily understand the life-work balance of the employees and also easily connect emotionally to the employees. Once an employee feels that they are an important part of the company then no one can stop the growth of the company.

FOUNDATION DAY

It has been said and believed for a long that for any great work to be done, it is important to have the right foundation. It forms the platform on which the future stands for any organization. It is therefore obvious that the day is special and needs celebration in a due manner for every organization. Every year when Foundation Day is celebrated in any institution, it is the time to reflect on the beginnings that took place and how since the inception changes have come paving the way for success over the years. Foundation Day is also the day when the past, present, and future of the institution come together, taking vows to uplift the institute to the greatest possible heights and dimensions.

While saying something on Foundation Day, we should not forget to thank the founders of this great institution, who had a vision of imparting such high-quality education to the students of south-eastern India. Without their vision, constant support and blessings, this institute would not have become what it is today. Special thanks also go out to the teachers who have been with the institute ever since its inception and guided the students in the best way possible in every sphere of their lives. This institution does not only produce academically outstanding individuals but people with overall development and growth. This is what true education is all about.

Like every year this year also NIST has celebrated its foundation day on 18th September. This was one of the memorable day in NIST history. Various types of club events, student prototype presentation & other achievements by students were showcased to the guests. A grand meeting was also conducted for students with the honorable Chairman and esteemed chief guests.

Shri Chandra Sekhar Sahu, Hon'ble Member of Parliament, and Shri Bikram Kumar Panda, Hon'ble Member of the Odisha Legislative Assembly graced the occasion as chief guest and guest of honor respectively, while Dr. Satya P. Das, University of South Florida, USA, and Dr. Laxmi Kanta Tripathy, Regional Director of Education, were chief speakers during the inauguration ceremony. The speakers discussed the different research fields and innovations happening around the world and how the current student could adopt with the trend, they also praised the education quality standard maintained at NIST. Several seminar, workshop were organized and different research outcome with proto-types were presented before the guests.

The whole campus was decorated beautifully with colorful light and exciting entertaining cultural events were performed by our student. Academic toppers of different programs were awarded with gold and silver medals, also alumni were awarded for their achievement in different categories by our esteemed invited guests on the cultural event dais. A wonderful and mouth watering dinner was arranged for all the NIST fraternity. The whole day event was coordinated by Dr. M. Suresh (HOD, ECE department & organizing head of the Foundation day) and his team. The team never left any stone unturned during the entire event to make it a grand success.







FOUNDATION DAY













(2001-2005 Batch)

DISTINGUISHED

OLONEL NIKHIL KUMAR

2022

Sunita Kumari (2008-2012 Batch)

Swastik Choudhury Sonali Satapathy (2003-2007 Batch) (2013-2017 Batch)

B. Tech.

🧶 gold

- Md Aslam, CSE, 2015-2019
- Chirag Kumar Kyal, CSE, 2016-2020
- B Harisha, ECE, 2017-2021

SILVER

Year: 2015-2019

- Binay Gorai (ECE)
- Purushottam Kumar (IT)
- Puja Tiwari (EE)
- **B** Pragnya (EEE)
- Suvrajit Champatiray (ME)
- Neha Kumari (CE)
- Lipam Sahu (EIE)

SILVER

Year: 2016-2020

- **B** Sachitra Kumar Patra (ECE)
- Salil Panda (IT)
- Sudhakar (EE)
- Debesh Shankar Tripathy (EEE)
- Sandeep Kumar Nayak (ME)
- Diptirani Mishra (CE)
- Monika Prasad (CE)

SILVER

Year: 2017-2021

- Riya Sharma (CSE)
- Ritika Kumari, (IT)
- Bimalendu Swain (EE)
- Subhrajyoti Satapathy (EEE) K. Deepak Choudhury (ME)
- - Nibedita Pradhan (CE)

M. Sc.

🧶 GOLD

Year: 2017-2019

- Alaka Pradhan (Physics) Year: 2018-2020
- Lopamudra Mishra (Physics) Year: 2019-2021
- Krishnapriya Bishi (Chemistry)

🦳 SILVER

Year: 2017-2019

- Ipsita Nanda (Chemistry)
- Deepita Sahoo (Mathematics) Year: 2018-2020
- Privanka Pradhan, (Mathematics)
- Lijarani Jena (Chemistry) Year: 2019-2021
- Sadananda Panda, (Chemistry)
- Subhashree P. Mahapatra (Mathematics)

MBA

🧶 gold

Year: 2017-2019

- Kalyani Panda Year: 2018-2020
- Sonali Mishra Year: 2019-2021
- Pradipta Kumar Sahu

MCA

🧶 gold

Year: 2016-2019

- Mani Ratnam Year: 2017-2020
- Abhilash Pattanaik Year: 2018-2021
- Niva Jai Singh

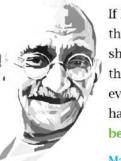
M.Tech.

🧶 gold

Year: 2017-2019

- Anurag Pradhan (VLSI) Year: 2018-2020
- Ipsita Dalai (CSE) Year: 2019-2021
- Chinmayee Sabata (VLSI)

66



If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning.

Mahatma Gandhi 🔰



FOUNDATION DAY

MESSAGE FROM ORGANIZING HEAD

The NIST Institute of Science and Technology celebrated its 26th foundation day on September 18, 2022. Shri Chandra Sekhar Sahu, Hon'ble Member of Parliament, and Shri Bikram Kumar Panda, Hon'ble Member of the Odisha Legislative Assembly, respectively, graced the occasion as Chief Guest and Guest of Honour, for the Inaugural Ceremony and appreciated the efforts put in by the college in giving quality education to the students and stated that every citizen must have the spirit to serve society. Dr. Satya P. Das, from the University of South Florida, USA, and Dr. Laxmi Kanta Tripathy, Regional Director of Education, were Chief Speakers during the Inauguration Ceremony. They encouraged the students to explore new avenues in their disciplines and wished them success. Dr. Sukant Mohapatra, Chairman of NIST, participated in the Inaugural Ceremony via online mode and acknowledged the accomplishments in academics and other aspects of NIST. Dr. Priyadarshi Tripathy, the Institute's Principal, addressed the occasion, explaining the Institute's accomplishments and praising the students for their efforts. Kshirod Ch. Mohapatra, the Registrar, expressed his gratitude to all of the dignitaries and urged the students to persevere in following their aspirations. The Inaugural Ceremony was followed by Seminars and Club Events.

Bimal K. Mishra, a Member of the Governing Body of NIST, and Dr. Ranjan Kumar Swain, Principal of Parala Maharaja Engineering College were the Chief Guests for the evening. On this day, NIST also honored its Alumni's accomplishments. The Alumnae who have made the college proud through their achievements in diverse fields were felicitated. The day had an array of Cultural events by the students who put up a grand evening with various performances depicting the colorful facets of our cultural heritage.

The date and time will pass away, but I am sure that the memories of that day will stay fresh in everyone's mind until we come back in 2023 with more accomplishments.



Where the **TEAM** works, **DREAM** Works

Dr. Muchharla Suresh HOD, Department of ECE Organizing Head: Foundation Day Celebration Committee



WELCOME TO NEW FACES OF THE NIST FAMILY

Dr. Sabyasachi Rath



Professor (Business Management)

Dr. Sabyasachi Rath has completed his master from Berhampur University with the project title "Sales analysis of Konark Television Pvt Ltd" . He has also successfully completed his PhD from Berhampur University in the year of 1992 with 27 years of teaching & research experience. He has 55 research papers in reputed national & international journal. Also he has worked at various positions such as corporate trainer, Start-up mentor, editor and script writer for different multi media education programs.

Ms. Pragnya Paramita Samanta



Asst. Professor (English)

Ms. Pragnya Paramita Samanta has completed her post-graduation in English from Berhampur University, Odisha. Her area of interest is Marxism, and currently she is working on realism and magical realism for her higher studies. Her experience at Berhampur University taught her one fundamental thing "Life is unpredictable, and a perfect blend of joy comes from hardship." Looking forward to an enriching career.

interacting with people, for which she national & international repute. has attended and participated in many international conferences & webinars.

Mrs. Prangya Das



Asst. Professor (Computer Science and Engineering)

Mrs. Prangya Das has completed her M.Tech (CSE) from NIST (AUTONOMOUS), Berhampur in 2012. She has successfully completed her M.Tech project on "A rule-based approach for analyzing spatial ambiguity measures based on fuzzy geometry image (color/gray) ". She has profound interest in the field of Machine learning and Deep Learning. Further she is carrying 13 years of rich teaching experience.

She has a keen interest in culture and research by publishing in journals of

Mrs. Swetanjali Maharana



Asst. Professor (Computer Science and Engineering)

Ms. Swetanjali Maharana has completed her M.Tech (CSE) from NIST (AUTONOMOUS), Berhampur in 2012. She has successfully completed her M.Tech project on "Traffic violater detection using machine learning technique".

She is further interested in data science, Computer network & web technology. She has more than 5 years of teaching experience to her credit.

Mr. Laxminarayan Dash





Asst. Professor (Computer Science and Engineering)

Mr. Vivek Priyadarshi Dash has completed his M.Tech (IT) from VSSUT, Burla, Sambalpur in 2015. He has successfully completed his master thesis on "An Adaptive online deterministic algorithm for multiprocessor scheduling with rejection". He has seven year rich experience in teaching at various colleges. Futher he has excelled in



Asst. Professor (Computer Science and Engineering)

Mr. Laxminaryan Dash has completed his M.Tech (IT) from "Odisha University of Technology & Research Bhubaneswar" in 2022.

He has successfully completed his master thesis on "Prevention of DDoS Attack in IoT Networks", he is also interested in computer security, computer network, and cryptography, also he has one year of industry experience as Vulnerability Analyst and Penetration Testing manager.



WELCOME TO NEW FACES OF THE NIST FAMILY



Asst. Professor (Computer Science and Engineering)

Asst. Professor (Computer Science and Engineering) Placement Executives (Placement)

M.Tech (IT) from "Odisha University of (IT) from "Odisha University of her MBA from NIST (AUTONOMOUS), Technology & Research Bhubaneswar" Technology & Research Bhubaneswar" Berhampur in 2022. She has worked in 2022. She has successfully in 2022. She has successfully on "Human Resource Digital completed her M.Tech project on completed her M.Tech project on Transformation of IT Sector in "HABC-MD: A Novel Routing Algorithm "K-mean & KNN implementation in Odisha" for her MBA project. Her area for wireless sensor network". She is cloud". Her interest is in computer of interest is in HR & Finance. She is also interested in wireless sensor security&computernetwork. network, Image processing and

machine learning. Also She got prestigious second best paper award in 11th international conference on computing, communication & sensor networks (CCSN-2022).

Mr. Prabhas Raj Panigrahi



Incubation & Innovation Coordinator (Start-up Incubation & Innovation)

Mr Prabhas Raj Panigrahi has Completed his MBA in International trade & Management. He has worked for NITI Aayog as a member in different task force. Also he is cofounder of a startup named Protionix Technology Pvt. Ltd, which is being examines the quality of the raw scaled-up at NIST Incubation center. He was also shortlisted among 25 freshness of all packaged products, young entrepreneur from India below grains & dals purchased from the the age of 25 by "Budding Beats stores. Also he has vast knowledge on Magazine, USA"

Mr. Shaik Akhtar Ali

Ms. Pratyasha Pradhan completed her Ms. Alka Dash completed her M.Tech Ms. Santosini Gouda has completed managing on & off campus drives.

Mr. Rabi Narayan Choudhury



Executive Chef (Food & Beverage)

Mr Shaik Akhtar Ali has 20 years of Mr. Rabi Narayan Choudhury has experience as chef in national and completed his graduation in international repute hotel brand like commerce and he is an exprienced hotel Taj, Hotel Leela palace & The person in accounts & administration. dominion club. Along with cooking he Currently, he is taking care of Admin loves to maintain the hygiene of the related work, Civil, and Maintenance mess as well as the cooking area. work of all the infrastructure of the Currently he is imparting training to campus. the mess staff and managing the hygiene of food preparation, service, distribution of food at different hostels. He personally examines the material such as checking the storing different raw materials.



Estate Incharge (Administration)



Page 15

INNOVATION & RESEARCH FRONTIER

Ph.D AWARD



Dr. Deepak Acharya, Asst. Professor, Dept. of Mathematics received his PhD degree from Fakir Mohan University, Balasore. He completed his PhD thesis entitled "Recent Trend in Summability Theory and its applications to Fourier series" under the supervision of Prof. Umakanta Misra, Professor in Mathematics, NIST Berhampur and Dr. Purna Chandra Nayak, Reader in Dept of Mathematics, of Bhadrak autonomous college, Bhadrak.

Dr. Radhakrushna Sahoo, Asst. Professor, Dept. of Mathematics received his PhD degree from National Institute of Technology Raipur. He completed his PhD thesis entitled "Wavelet aspects of algebraic structures" under the supervision of Dr. Arvind Kumar Sinha, Associate Professor, Department of Mathematics, NIT Raipur.





Dr. Aswini Kumar Khuntia, Asst. Professor, Dept. of Mechanical Engineering received his Ph.D. degree from the Indian Institute of Technology, Dhanbad. He completed his Ph.D. thesis entitled "A numerical study of a synthetic jet and its application for electronics cooling" under the supervision of Professor Sanjay K Ghosal, IIT Dhanbad, and Dr. Panda Patro Associate professor of VSSUT Burla.

RESEARCH PUBLICATION

Dr. Duryodhan Sahu, professor of the department of chemistry published a journal entitled "Removal of Hexavalent Chromium from Industrial Wastewater Using Bio-adsorbent Prepared from IPOMOEA CARNEA" in the journal Chemistry Africa (SCOPUS, doi:10.1007/s42250-022-00472-8). Dr.SudhansuSekharBiswal, Dr.Chittaranjan Panda, Dr.Smruti Ranjan Parida, Dr.Subrat Kumar Mallick, and Trilochan Jena of Siksha 'O'Anusndhan (Deemed to be University) and Jitendra Kumar Sahooof GIET University were the other research collaborators.

Dr. Preeti Ranjan Sahu, faculty of the school of electrical engineering has published a journal entitled "Coordinated Design of FACTS Controller with PSS for Stability Enhancement Using a Novel Hybrid Whale Optimization Algorithm - Nelder Mead Approach" in the journal Electric Power Components and Systems (SCI, IF 1.07; DOI: 10.1080/15325008.2022.2129860). Dr. Prakash Kumar Hota and Dr. Sidhartha Panda of VSSUT, Burla, Dr. Rajesh Kumar Lenka of NIT, Rourkela, Dr. SanjeevikumarPadmanaban of the University of South-Eastern Norway, and Dr. Frede Blaabjerg of Aalborg University, Denmark are the other research collaborators.

Dr. Ratikanta Nayak, Assistant Professor of the Department of Physics has published a journal entitled "Phosphonated MWCNT-Poly (2, 5-Benzimidazole): an improved nanocomposite membrane for high-temperature fuel cells" in the journal "Advances in Natural Sciences: Nanoscience and Nanotechnology" (SCI, IF 2.379: DOI 10.1088/2043-6262/ac866c). Prof. Prakash Chandra Ghosh from IIT Bombay, Amit Bhosle from IIT Roorkee, and Dr. Reeshab Goenka from Advanced Biofuels Division, The Energy and Resources Institute (TERI), New Delhi are the other research collaborator.

Dr. Chinmay Kumar Giri, Assistant professor of Department of mathematics, published a book chapter entitled "Convergence and Comparison Theorems for Three-Step Alternating Iteration Method for Rectangular Linear System" in Applied Analysis, Computation and Mathematical Modelling in Engineering of Springer through International Conference on Applied Analysis, Computation and Mathematical Modelling in Engineering 2021.

Dr. Ratikanta Nayak, Assistant professor of Department of Physics, published a book chapter entitled "Polymer Nanocomposite membrane for FuelCell Applications" in Application of nanomaterials in energy storage and electronics of Bentham Books in August 2022.

Dr. Pradyumna Kumar Patra and **Prof. Harikrishna Gantayat**, faculty of ECE have published two journals entitled "An efficient RBF-DCNN based DOA estimation in multipath and impulse noise wireless environment" in Transactions on Emerging Telecommunication Technologies (SCIE, IF:3.31 doi:10.1002/ett.4606) and "An efficient direction-of-arrival estimation of multipath signals with impulsive noise using satin bowerbird optimization-based deep learning neural network" in Expert Systems (SCIE, IF: 2.8; doi:10.1111/exsy.13108), in collaboration with Dr. Trilochan Panigrahi, faculty of Department of ECE, NIT Goa.



FACULTY ACHIEVEMENTS



Dr. Ratikanta Nayak, Assistant professor of Department of Physics has received the most prestigious DST SERB Start-up Research Grant (Govt. of India) of nearly Rs. 18 Lakh for his project entitled "ABPBI-ZrP Nanocomposite Membrane: A potential low cost ion exchange membrane for Vanadium Redox flow battery energy storage system".

INTERNSHIP



The Department of Mechanical Engineering, NIST (Autonomous) has offered a summer internship programme. In this programme, 26 students from the Government Polytechnic, Bargarh, Odisha, have actively participated under the banner of NIST Skill Development Center. The programme ran from 18th August to 15th September, 2022.

The diploma students were trained to a variety of industrial-ready mechanical courses such as, AutoCAD, CNC Machining, Rapid Prototyping, and Metal Casting. The students received certificates in the

AutoCAD, CNC Machining, Rapid Prototyping, and Metal Casting. The students received certificates in the valedictory ceremony after the successful completion of the summer course. In future, we intend to arrange such internship training workshops throughout the year in order to overcome time constraints and provide more room for learning.

HACKATHON

Final year student V Roshan Kumar Patro won second runner up position in the Pravega Innovation Summit, 2022 at IISC Bangalore.



Roshan Kumar Patro, a final year CSE student participated in a national-level Hackathon event at the Indian Institute of Science (IISc) Bangalore, where the top 8 finalists were chosen for the final round amongst 200+ teams. They won the 3rd prize amongst the top 8 after a detailed pitching and prototype session. The team was felicitated at JRD Tata Auditorium, IISc with a trophy and cheque. This was a part of the Pravega Innovation Summit, 2022 of the IISC Bangalore campus. Our alumnus Mr. Ajit Dash (2020 ECE), Mr. Debasish Panda (2021 ECE), and Mr. Prakash Panigrahi (2021 ECE) were part of the development and testing & verification of the prototype non-invasive glucometer under supervision of Dr. Sandipan Mallik, faculty of ECE. Team Canopy participated and got the Special Mention Award in HackaversuMM'22 event at Maharishi Markandeswar University, Mullana, Haryana



Team Canopy led by Rohit Raj Padhi (4th Year ECE) along with S.Sovan Kumar(4th Year ECE), Ayush Behera (3rd Year EEE), and V.Someswar Rao(3rd Year ECE), B.Tech students participated in HackaversuMM'22 event at Maharishi Markandeswar University, Mullana, Haryana for two days (2nd - 3rd September, 2022) 30 hrs.

In this hackathon the top 10 teams were chosen for the final round. Team Canopy got the Special Mention Award amongst the top 10 after a detailed pitching and prototype session on carbon capture and sequestration pertaining to vehicular pollution. The team was mentored by Dr. Sandipan Mallik, Associate Professor of the Department of ECE.



WORKSHOP, SEMINAR & TALK

A Talk on "Distributed Control of a Microgrid"



A seminar on "Distributed Control of a Microgrid" was organized by the School of Electrical Sciences in collaboration with the Research and Development cell & IIIC Cell, on 1st September 2022. The resource person of the program was Prof. Bidyadhar Subudhi, Professor, School of Electrical Sciences, Indian Institute of Technology Goa who spoke on various distributed control strategies of a Microgrid. Dr. Subudhi talks primarily focused on design consideration of microgrids, including the current status and also future opportunities of renewable energy, energy storage, microgrid control techniques. After the presentation, Dr. Subudhi met with young minds in the school of electrical sciences & discussed various aspects of Electrical sciences in near future. A Lecture by Prof. Durgamadhab Misra, NJIT, USA



Prof. Durgamadhab Misra, Professor, and Chair, of Electrical and Computer Engineering of New Jersey Institute of Technology, USA, and a distinguished lecturer of IEEE Electron Device Society visited at NIST Berhampur campus on 12th August and interacted with the faculty members.

He discussed the possible future technology roadmap to be followed in the area of the Semiconductor domain and various opportunities for research collaboration & student exchange program with NJIT.

He also delivered a lecture to the students of the ongoing "Cadence Certification" course and deliberated the future career opportunities for the students of Electronics and Communication Engineering.

Guest Lecture by Dr. Tarakanta Nayak, IIT Bhubaneswar



Dr. Tarakanta Nayak, Associate Professor of the "School of Basic Science" of IIT Bhubaneswar delivered a lecture entitled "Complex dynamics fractals independence polynomial and independent fractals of graph" on 10th September 2022, organized by the Department of Mathematics of NIST Berhampur.

He also interacted with M.Sc students & discussed the future scope in the field of Mathematics.

National Workshop on "Application of Econometrics tools in Social Sciences and Management Research"

The Department of Management Studies, NIST organized a National Workshop on "Application of Econometrics tools in Social Sciences and Management Research" from 18th to 23rd July 2022. The workshop was inaugurated by Prof. S. N. Mishra, former dean of KIIT University, Dr. Sukant K. Mohapatra, Chairman, NIST, Dr. Priyadarshi Tripathy, Principal, and Sri Khirod Ch. Mohapatra, Registrar. In his inaugural address, Prof. Mishra highlighted the importance of these tools in the research and decision-making process. Speaking on this occasion, Dr. Tripathy said today's world is driven by data, and the inclusion of technology will change the facets of life in the coming



days. The resource persons from various institutes of the country delivered their lectures in this workshop. The workshop was coordinated by Dr. Pramath Nath Acharya and Dr. Gayatri Panda. On this occasion, the organizing team extends hearty thanks to the Chairman, Principal, and Registrar for their consistent support in making this program a grand success.



START-UP & INDUSTRY COLLABORATION

NIST builds capacity to assemble commercial PCBs



NIST has established specialized labs for complete manufacturing of commercial Printed Circuit Boards, with an investment of nearly 1.2 million. Now the entire process needed for PCB manufacturing can be completed with our inhouse facilities. Starting from schematic, layout, printing, component placement, reflow and testing. Single- or double-sided PCBs with up to 32 different SMD components can be assembled in a fully automated setup. Earlier, the PCBs were being sourced from outside (specifically from China).

To do this, parties had no choice but to provide the blueprint of the PCB to a foreign country. This posed a security issue for projects that were of confidential nature. A few R&D institutes had their own in-house PCB fabrication solutions which were not available or selectively available to outsiders. The in-house setup at NIST will come as a help to sensitive projects requiring confidentiality. One of the startups has already started working on commercial PCB for lighting purpose.

NIST is an Incubation center for IoT startups, recognized by Startup Odisha. Establishment of this facility is expected to cater to startups and students who work on prototyping of electronic devices. There is no minimum order quantity (MOQ) limit for availing the service. One can visit the website of the incubation cell to place orders. It is a three-step process: (1) Upload the design and specify the order size (2) Get an estimate (3) Pay and place order.

The Communication Engineering specializations of NIST and nearby Institutes can benefit from this lab as well. To familiarize the students and faculty members about the facilities available, a workshop is being conducted from 3rd Dec 2022. Interested persons can register at the link.

SCIENCE / ENGINEERING / MANAGEMENT

Article

Page 19

ENTREPRENEURS/STARTUPS: "APO DIPO BHAVA (BE A LIGHT UNTO YOURSELF)"

An entrepreneur is a person engaged in the process of introducing innovation to the market in the form of new ideas, products, or services through the creation and successful operation of a new commercial enterprise to generate profits.

To begin one's business path, one needs motivation. We can categorize entrepreneurial growth into the following three categories, which are closely based on what Goutam Buddha said in his final words to his followers:

"Apo Dipo Bhava" (be a light unto yourself)

An entrepreneur must possess a combination of Entrepreneurial ambitions, Compelling reasons and Facilitating factors in order to be successful.

Self-sufficiency, financial security, social acceptance and recognition, the formation of organizations, raising living standards, economic growth, job creation, a self-sufficient economy, and export promotion are all benefits of entrepreneurship that, in the end, grant thousands of people their freedom and liberty.

In addition to this, the entrepreneurial environment also plays a crucial role in presenting opportunities and challenges to entrepreneurs. The entrepreneurial environment refers to the many contexts in which businesses of all sizes - big to small - must function. Each of these scale of business is unique in itself in terms of challenges and opportunities.

We observe a strong rise in recent trends in the domains of biotech start-ups, no-code start-ups, agricultural technology, 3D printing, customized products, etc. with the growth of entrepreneurship. With proliferation of recent technology, we can expect to witness future trends in the areas of virtual reality and augmented reality, sustainable/renewable energy, blockchain, microfinance, defense & logistics, etc. in everyday life in the upcoming years.

To support this, numerous schemes have been launched by both central and state governments i.e., Mudra loan, PMKVY, PLI scheme, Subsidies etc. Being a student of Management Studies, I would recommend to follow this Entrepreneurial process with the following steps to kick start an Entrepreneurial journey:

5. Committing

- 1. Ideation
- Concepting
 Business Plan
- 6. Validating 7. Scaling
- 4. Resourcing 8. Establishing

Apart from this there are other various components of Startup ecosystem like Universities, Incubators or accelerators, Freelancers, Agencies or Consultants that help one in incubation, funding, team and growing. While it may sound absurd, it is also beneficial to watch movies and web-series in free time that provides exposure to the very realistic world of entrepreneurship and startups. Some examples are: Upstart, the wolf of wall street, Pursuit of happiness, TVF pitchers, Bad boy billionaires, Scam 1992, The office, Shark Tank, How I made millions.

EVENTS & CLUB ACTIVITIES

NIST Research Cell Project Showcase



The research cell of NIST Autonomous An Awareness camp on the Twenty-one cadets from NIST organized a project showcase on 19th Employee's State Insurance Scheme participated in the 10days NCC demonstrated by the students on the Regional Director, Bhubaneswar, ESIC, conducted by by 1(O) Naval unit NCC, eve of the Foundation Day celebration. and Mr.Manas Ranjan Acharya, Berhampur at SMIT Berhampur. Which The projects were highly appreciated Manager. Mr. Panda spoke about how focused on personality development, by the distinguished guests and the the ESIC scheme is helping employees. social awareness with arm training. other visitors in terms of their It is designed to protect employees Missioned with overall development innovativeness. Projects include and provides medical services to the of the cadet, number of cultural blocks using waste plastic and fly ash, workshop was coordinated by Shri K. and other social event was done for 10 Non-Invasive Glucometer, and many Mallick, CF&A, NIST, and Ashok Ku. days & our student secured 4th position more.



ESIC Awareness camp

Samantaray.

NCC Combined Annual Training Camp

September 2022 where the best 15 (ESIC) was held at NIST. The camp was Combined Annual Training Camp projects with prototypes were attended by Mr. Partha Sarathi Panda, (CATC) from 14th July to 23rd July Smart Mirror, NCARB-CAP, Pervious insured and their families. The activities, team work, physical activity overall.

Industrial visit to NALCO



sibility initiatives.

A Discussion on 5G Network



MBA students visited National Dr. Ashutosh Dutta, Senior Scientist, The two-day free eye checkup camp ment in the corresponding domain.

Free Eye Checkup Camp



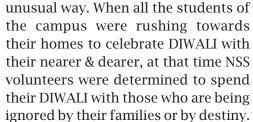
Aluminium Company Limited - and 5G Chief Strategist, Johns was conducted by NIST NCC for all the NALCO at Damanjodi, Koraput, on 1st Hopkins University Applied Physics staffs and students' community at August 2022 for an industrial Laboratory (JHU/APL) visited NIST on NIST campus with the joint excursion as part of their academic 11th July 2022. Additionally, he has collaboration with SHANKAR EYE activities. Management has vital role been serving as the IEEE Future HOSPITAL. In this camp more than 200 for the prosper of any industry. A Networks Initiative's founding co- persons checked up their eyes and the good manager only take a calculated chair, which focuses on activities doctors advised how to care about the risk, take right decision at right related to 5G standards, education, eye to avoid any further eye related moment. The purpose of the visit is to publishing, test beds, and roadmaps. disease and issues. The camp is learn the managerial expertise Dr. Dutta delivered a talk entitled smoothly conducted by NIST NCC adopted by NALCO. Students learn "Next Generation Mobile Networks cadets with the supervision of Mr. about the safety measures, teamwork, with 5G" & interacted with the faculty Pabitra Ku. Gouda and Prof. Nilesh channel management, and shift of the institute. He visited different Dalai. Registrar Khirod Chandra management techniques used by research laboratories and suggested a indurated the free eye check up camp. NALCO and are introduced to future road map, especially on 5G A medical team from SHANKAR EYE NALCO's Corporate Social Respon- technology towards further develop- Hospital were present & make the camp to a great success.

EVENTS & CLUB ACTIVITIES

Poshan Abhiyan



The 53rd National Service Scheme (NSS) day has been celebrated by NIST (AUTONOMOUS) Berhampur. In this regard, the "POSHAN ABHIYAN" program was conducted at three places such as Berhampur railway station, Gokuldham & Nilekantheswar temple of Berhampur city. The food packets were served to around 120 numbers of destitute by 75 active volunteers of the NSS unit. The whole event was managed by faculty Advisor Ms. Pradeepta Biswal with the coordination of Capt. Priyanka Pratihari and Gaurav kumar. This activity provided a suitable platform for the students to interact with the people who have less in life.



They distributed breakfast with the inmates of "MARILLAC MERCY Old Age Home" at Berhampur followed by cultural events under the able guidance of Prof. N P Tripathy, School of Electrical Engineering and



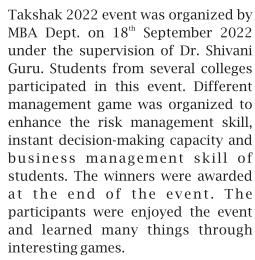
Prof. Pradeepta Biswal of Department of Civil Engineering. The young NISTians of club NSS enjoyed the company of the "MARILLAC MERCY Old Age Home" inmates and left the home with lots of blessings.



architect or the architect of the Gods, Lord Vishwa-karma is worshipped. The ME Dept. of the NIST also celebrated this festival with a divine spirit in in its workshop area on 17th September 2022. The faculties and staffs from several departments joined in this event. Dr. Souren Mishra, HOD Mechanical Engineering and his team have successfully managed the event.

Takshak 2022







Page 21



Old Age home visit by NIST student



NIST has been serving its community from its inception. This year the NSS unit of NIST (AUTONOMOUS) has festival celebrated by the Hindu planned to celebrate the DIWALI in an community. On this day, the divine



Biswakarma Puja at Campus



Vishwakarma Puja, also known as Vishwakarma Jayanti, is an important

LITERATURE, ART & PHOTOGRAPHY





LITERATURE, ART & PHOTOGRAPHY

Art & Photography





ALUMNI SPEAK

Mr. Manas Kar

B.Tech (Computer Science), Batch: 1999 Current engagement: Bigdata Architect Current Location: Waterloo, Canada



The unique eight sided Octagon building was built at that time and he spent his most precious student life under its roof. He still remember regarding his initial days of learning coding and the great teacher Rabi Reddy Sir, Who taught very complex logic in very

simplified way. The interesting story of "Tea making Process" was explained by Reddy Sir in connection with the breaking of any problem statement during writing the code. He also never forget to share that how he was involved as the third wheel to execute of any sinister plan made by his friends.

A long journey was there from NIST Campus, Berhampur to Waterloo, Canada and becoming a Big data Architect, still he never forget his alma mater NIST and those golden days he spent from 1999-2003. It is the time to decode his college days including his favorite place in campus and his thought & ideas about job, work life balance and current education system. Our editor Dr. Sushant Kumar Sahu did a frankly talk with him to decode his college days.

NIST Chronicle: What is your story related to joining NIST?

Manas: Joining computer science would mean access to computer and play videogames. Me being in Berhampur played a huge role choosing NIST. Kids these days are hundred times more aware and prepared.

NIST Chronicle: What is one remarkable memory with friends that you made while you were at NIST?

Manas: I had a spectrum of talented friends. Friends who would push me to study better to friends who would need me to be the third wheel in their umm ... sinister plans. I cherish all of that. More than I would like to admit.

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

Manas: Octagon. It was being built back then. I was split between VLSI (Ajit Panda Sir) and coding (Ravi Reddy sir). Focusing on coding did help in interviews so it was an easy choice for me.

NIST Chronicle: You must be remembering your teachers. Who were the key influencers and why?

Manas: Ajit Panda Sir took two subjects. I enjoyed them. If I was not one for my easy choices, my career would have been totally different. Ravi Reddy sir came to fill in for regular teachers just couple of times ©, C++.) I don't know about rest, but what he told stuck to me. Basically, how to break a problem statement. Most of us would have heard the tea making process.

NIST Chronicle: What are your college friends doing now a days? Are you in touch with them?

Manas: Yeah. My friends are all over the globe. I am in touch with some of them. I would love to be in touch with all of them though. If not anything, just to reminisce those old memories.

NIST Chronicle: If a student of +2 or high school would seek your advice on making a career, what would be your advice? Or may be you would like to give them a mantra or a few thumb rules. Anything?

Manas: Learn to learn by yourself. If you have internet and a device (cellphone, tablet, laptop) you can crack anything. Don't be afraid to make mistakes.

NIST Chronicle: Lets 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?

Manas: I would change the course curriculum. I don't think we need to study 48 subjects. Kids should have a choice to what subjects they study. I believe in learning on the job.

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

Manas: Earnings are tied to satisfaction in my opinion. If it's not and something else is important for you like research, recognition good for you. I think there is a huge satisfaction in setting a goal and achieving it.

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

Manas: Please take chances. Life is all about making mistakes and learning from them. If its others mistake you are learning from, you are a champion.







Page 25

CAMPUS TOUR



GRAB YOUR COPY NOW!



nist.edu/chronicle/



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