

SiliconTech

A QUARTERLY NEWSLETTER

Volume 5 Issue 3 January - March 2024

EDITORIAL

Greetings from Silicon!

I am pleased to announce to all readers that Silicon Institute of Technology, Bhubaneswar has been elevated to the status of Silicon University from 31st January 2024. This transformation marks a significant milestone in our journey towards excellence in technical education.

As the first Chairman of Silicon University, it is my vision and aspiration to see our

institute emerge as one of the premier technical universities in the country; our goal is not only to impart technical knowledge but also to nurture human values and produce well-skilled manpower that can contribute

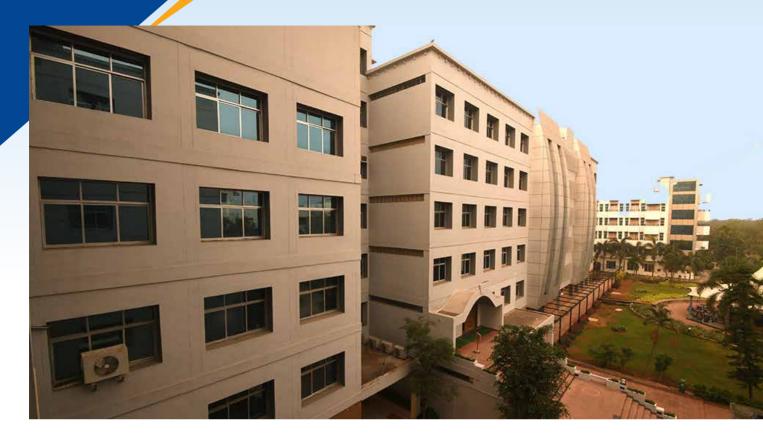
meaningfully to our nation's development.

This elevation comes with increased responsibility for all of us. As staff members, educators, administrators, and stakeholders, we play a crucial role in shaping the future of our university. It is imperative that we work together with dedication, commitment, and a shared sense of purpose to achieve our objectives.

I extend my heartfelt thanks and congratulations to all of the stakeholders of Silicon University for their diligence, commitment, and cooperation. Together, let us strive to realize the full potential of our institution and make Silicon University a beacon of excellence in technical education.

Dr. Joe MadiathChairman, Silicon University

UNIVERSITY HIGHLIGHTS



Silicon Institute of Technology, Bhubaneswar gets upgraded to Silicon University, Odisha

Silicon Institute of Technology, Bhubaneswar got upgraded to Silicon University, Odisha with effect from January 31, 2024.

As Silicon University now emerges onto the educational landscape, it brings with it a legacy of academic excellence and a promising future. Established in 2001, SiliconTech, the engineering institute campus of Silicon University has consistently been at the forefront of engineering education.

Silicon University's primary mission will be to disseminate knowledge by offering cutting-edge academic and research facilities in the fields of Engineering and Technology as per the norms and standards of courses or programs prescribed by different regulatory bodies. The University will play a pivotal role as a center for fostering cooperation between academics, research, and industry.

Silicon University will actively identify and establish long-term partnerships with industrial sectors and individual companies through Memorandums of Understanding (MoUs). These collaborations will create

valuable opportunities for both faculty members and students to engage in real-life problem-solving and secure sponsorships. Additionally, the university will offer support to enhance the employability of its graduates by providing training in entrepreneurship and specialized soft skills required by industries.

Elevating the college to "University" status will open doors for sharing experiences and engaging in collaborative endeavors for advanced education and research with other Universities within the state, across the country, and even internationally.

Dr. Joe Madiath, the Chairperson, Mr. Sanjeev Nayak, the Vice-Chairperson, Dr. Jaideep Talukdar, the Vice-Chancellor, Prof. Pradipta Kumar Mohapatra, the Registrar, Dr. Debabrata Kar, Dean (Instruction), Dr. Ramaprasad Panda, Dean (Student Affairs), Dr. Manoranjan Behera, Dean (Research & Consultancy), Dr. Prayag Prasad Mishra, Controller of Examinations and Dr. Amar Kumar Behera, Finance Officer, will lead the University in their respective positions.

NEWS AND EVENTS





Silicon establishes the JBS Haldane Centre for Molecular Medicine

Silicon in collaboration with inDNA Life Sciences Pvt. Ltd. established the JBS Haldane Centre for Molecular Medicine (HCM) on 1 January 2024 on its premises. Dr. Madhabananda Kar, Executive Director & Chief Executive Officer (CEO) at All India Institute of Medical Sciences (AllMS), Darbhanga, inaugurated the HCM. The Centre for Molecular Medicine will train Life Sciences graduate

students in the field of Molecular Medicine and provide knowledge on core aspects of biochemical genetics, microbial genetics, epigenetics, molecular oncology, genetic counseling, molecular immunology, infection biology, bio-computing, advanced bioinformatics, tissue engineering, and stem cell biology.





FMET 2024

The Department of Basic Sciences and Humanities at Silicon University organized the 6th National Seminar on Functional Materials for Emerging Technology (FMET 2024) from 29-30 March 2024. The two-day program focused on new developments in advanced functional materials. Distinguished speakers including Dr. Kulamani Parida from Siksha 'O' Anusandhan University, Bhubaneswar, Dr. Pranati Nayak from Institute of Chemical Technology, Bhubaneswar, Dr. Bikash Kumar Jena, CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, Dr. Satya Prakash Sahoo, Institute of Physics, Bhubaneswar and Dr. Satyaprasad P Senanayak from National Institute of Science Education and Research, Bhubaneswar shared their knowledge and expertise.

NIRMAN 3.0

Silicon University organized its annual tech fest NIRMAN 3.0 in collaboration with the Indian Chamber of Commerce (ICC) from 19-21 February 2024. The inauguration ceremony comprised of expert talks by Dr. Jaideep Talukdar, our Vice Chancellor, Shri J B Pany, Chairperson, ICC Odisha, Dr. Sanjay Pattnaik, Convenor (HR & IR), ICC Odisha, Dr. Mahendra Prasad Agasty, President of our Institution's Innovation Council, Shri Sunil Taneja, Managing Director, Kasi Sales & Services, Dr. Ashok Badamali, Founder & CEO, Inofinity Research and Development, Shri G G Pal, Deputy Chief Executive Officer, Vedanta, and Shri Jyoti Prakash Pal, Director & Regional Head, ICC Odisha. A total of 720 students from across the state participated in various competitions like Line Follower, Robo Race, Hacknation, and Idea Presentation.



Expert talk on Chromosomal Cohesion and Separation in Aneuploidy and Tumorigenesis

The JBS Haldane Centre for Molecular Medicine (HCM) at Silicon collaborated with inDNA Life Sciences Pvt. Ltd. to organize an expert talk on 'Role of Chromosomal Cohesion and Separation in Aneuploidy and Tumorigenesis' on 22 January 2024. The talk was delivered by Dr. Debananda Pati, Professor of Paediatric Oncology at Baylor College of Medicine, Houston, Texas, USA. In his talk, Dr. Pati shed light on Separase as a drug target for cancer therapy and discussed the latest breakthroughs to foster a deeper understanding of the ongoing battle against cancer.



Workshop on 'Electrical and Electronic Devices'

The Department of Electrical and Electronics Engineering (EEE) at Silicon organized a workshop on 'Electrical and Electronic Devices' on 2 March 2024. The objective of the workshop was to improve the participants' foundational technical knowledge for real-world applications, integrate theoretical understanding with practical knowledge, and offer a forum for productive information exchange. Mr. Santanu Sen, Assistant Professor of Electrical Engineering at Odisha University of Technology and Research (OUTR) was the external judge of the workshop. He assessed the students' comprehension of the operation of the devices and evaluated their presentation skills.



Expert talk on 'Introduction to Deep Learning'

The Department of Computer Science and Engineering (CSE) at Silicon organized a technical talk on 'Introduction to Deep Learning' on 31 January 2024. The talk was delivered by Mr. Shanti Swaroop, a technical architect at Tata Consultancy Services Limited (TCS). The objective of the talk was to enhance the understanding of Least Mean Squares (LMS) and Gradient Descent algorithms and learn about building them from scratch in Python, for various signal processing and optimization applications. In his talk, the speaker explained that these algorithms are fundamental optimization techniques widely used in machine learning and signal processing.



Expert talk on 'Relevance of Indian Traditional Knowledge'

The Department of Basic Sciences and Humanities (BSH) at Silicon collaborated with the Internal Quality Assurance Cell (IQAC) to organize an expert talk on 'Relevance of Indian Traditional Knowledge' on 20 January 2024. The expert talk was delivered by Dr. Debi Prasad Mishra, Director & Professor of Mechanical Engineering at the National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata. In his talk, Dr. Mishra created awareness about the importance of Indian traditional knowledge and emphasized the potential of transforming this traditional wisdom into profitable ventures that can benefit humanity.



ZYGON 2024

Silicon University organized Zygon, the annual cultural fest on 23 and 24 February 2024. This year, Zygon was themed on the magical world of Harry Potter, a famous fantasy series authored by J.K. Rowling. During the first half, various competitions were organized by the clubs and societies. In the latter half, cultural events were organized in which students showcased their creativity and innovation. A new addition to this year's cultural fest was the 'Odyssey Cup' for honouring the best-performing B.Tech. batch. The students of second year B.Tech. emerged as the winners of this year's 'Odyssey Cup' with the highest score.



'The Scrapper's Way' @Book Launch

The Meta Academics cell at Silicon University launched the book 'The Scrapper's Way: Making it Big in an Unequal World' on 24 February 2024 during the annual cultural fest Zygon 2024. The book was unveiled by the author, Shri Damodar Padhi in the presence of our Vice Chancellor, Dr. Jaideep Talukdar. Sri Damodar Padhi, former Chief Learning Officer (CLO) of Tata Consultancy Services Limited (TCS) is a passionate storyteller. 'The Scrapper's Way' is a guiding light that will help the readers make wise choices when it comes to their personal and professional lives.



SITMUN 2024

Silicon University organized the 6th edition of the Silicon Model United Nations (SITMUN 2024) from 28-30 March 2024. The conference had three committees—United Nations General Assembly Disarmament and International Security Committee (UNGA DISEC), United Nations Human Rights Council (UNHRC), Sustainable Development Goals (SDG) and one international press. The objective of SITMUN is to assist students in developing a deeper comprehension of current affairs, diplomacy, international relations, and other UN agendas. A total of 320 delegates from different universities and colleges across India attended the conference.



Code Relay@Coding Competition

The Student Innovation & Promotion Cell (SIPC) and the Indian Society for Technical Education (ISTE) student chapter at Silicon University organized Code Relay, a coding competition on 1 March 2024. Code Relay was hosted using real-world coding challenges from the HackerRank website. A total of forty five teams comprising three members each participated in the event. The use of electrical gadgets was strictly prohibited to let the contestants solve the problems only with the help of their knowledge and presence of mind. The winners were Aditya Kumar Dutta, Ashish Singh, and Manish Kumar from the CSE 2025 batch. The runners-up were Santosh Rout (CSE), Ayush Raj (ECE), and Piyusha Pritam Nayak (CEN) from the 2026 batch.



75th Republic Day

Silicon celebrated the 75th Republic Day of India on 26 January 2024. The Silicon Green Club (SGC) organized a plantation drive to create awareness about the rising concerns of deforestation. The Republic Day celebrations began with Dr. Jaideep Talukdar unfurling the national flag and addressing the assembled audience with a short speech, remembering the founding fathers of our nation and the brave souls who gave their lives for the freedom we are enjoying today. The national anthem was sung and our students performed various cultural acts to add vibrance to the celebrations.



International Women's Day 2024

The Social Awareness and Gender Equality for Women (SAGE-W) cell at Silicon University organized the International Women's Day (IWD) celebration on 14 March 2024 on the campaign theme 'Inspire Inclusion'. The guest speakers of IWD 2024 were Ms. Namrata Chadha and Dr. Padmini Panigrahi. Ms. Chadha is a lawyer, a social activist, and an ex-member of the State Commission of Women, Odisha. Dr. Panigrahi is the Founder of the Koshala Group, an entrepreneur, and a TEDx speaker. Ms. Chadha discussed the significance of awareness campaigns for inspiring and encouraging women's growth at the grassroots level. Dr. Panigrahi focused her discussion on developing one's skills to start a business.



Staff Award Function

The Staff Welfare Committee of Silicon University organized the Annual Staff Award Function on 10 February 2024. The award function began with the celebrations of the University status conferred to Silicon by the Government of Odisha. Furthermore, forty nine employees received the Long Service Award for continuous service and commitment to Silicon and five faculty members were felicitated for completing their Ph.D. in academic session 2023-24. Our faculty and staff members orchestrated for various cultural performances. The children of our staff members captivated the audience with a diverse array of performances that encompassed singing, dancing, and instrumental brilliance.



'Health Issues and Understanding Hormones'@Awareness program

The SAGE-W cell at Silicon University organized an awareness program on 'Health Issues and Understanding Hormones' on 26 February 2024. It was specially targeted for female students, considering the complexity of a woman's hormone-regulated physical health and the need to acknowledge and treat it. The awareness session was conducted by Dr. Dilleswari Pradhan, Professor of Pathology at Saheed Rendo Majhi Medical College & Hospital (SRMCH) in Bhawanipatna, Odisha. In her talk, Dr. Pradhan discussed the factors that affect our general health and emphasized the role of hormones on our mental and physical health.



INQUIZIA@Quiz Competition

Silicon Quiz Club organized 'INQUIZIA- The Quizzing Carnival', a two-day quiz fest on 5 and 6 January 2024. The event comprised of three quizzes- the India Quiz, the Aurabinda Misra Memorial Quiz, and the Game of Thrones Quiz. A total of 130 teams of school students, college students, and corporate enthusiasts participated in these three quizzes. The winners of the India Quiz were from Accenture, and the first and second runners-up were from KIIT University. The winners and runners-up of the Aurabinda Misra Memorial Quiz were from KIIT University. The winners and runners-up of the Game of Thrones Quiz were from Silicon.



15th Annual Athletic Meet

Silicon organized the 15th Annual Athletic Meet on 6 January 2024 at SunDeck, the sports complex. The athletic meet was inaugurated by Dr. Saroj Kanta Misra. Dr. Ramaprasad Panda delivered the welcome address and extended his best wishes to the participants. The oath-taking ceremony was then led by Mr. Debasis Das, the Sports Secretary. All the track and field events were smoothly conducted under the supervision of Mr. Gyana Ranjan Biswal, Faculty Coordinator of the Sports Club, and Mr. Balram Mohanty, the Sports Officer. Three external judges evaluated the performances of the participants to select the winners.



SPENT Quiz

The Quiz Club of Silicon University conducted 'Spent Quiz 2024' on 14 March 2024. The Spent Quiz was based on sports and entertainment. The three best-performing teams emerged as the winners and runners-up. Swaraj Mohapatra and Biswanath Patnaik from the CST 2026 batch were the winners. The first runners-up were Anshuman Rath and Adyasis Maharana from the ECE 2025 batch. Dibyesh Mohanty (EEE, 2027) and Samyak Ranjan Panda (CSE, 2027) were the second runners-up. The quiz was conducted by Quiz Master Kashyap Panda and coordinated by Mr. Dhananjay Tripathy, Faculty Coordinator, Silicon Quiz Club. The students' enthusiastic response and active involvement made this quiz successful.



Cultural Nite 2024

The Campus life Coordination Committee (CCC) of Silicon University organized a cultural nite on 16 March, 2024. The event was centered on the theme of 'Indian Culture'. The objective of the event was to create an environment of splendor and imagination while exhibiting the unique Indian culture through its various art forms. There were musical sessions, dance visuals, and an elegant promenade that was quite captivating. The event, which was held at North Lawn, brought all the students together to celebrate and value cultural diversity.



Scopus/SCI Indexed journals: 7
Conference Proceedings: 8
Book Chapters: 1
Patents: 1

The Department of Electrical and Electronics (EEE) research team has done significant research in different areas.

Frequency and voltage stability of multi-microgrid system using 2-DOF TIDF FUZZY controller

The team is analysing frequency and voltage stability of multi-microgrid system using 2-DOF TIDF FUZZY controller. Two parameters, voltage, and frequency, are required for smooth delivery of quality power to consumers. Therefore, in this paper enhancement of frequency and voltage stability of a multi-microgrid system with a proposed hybrid fuzzy logic controller with two degrees of freedom tilt-integral derivative with filter (2DOFTIDFFUZZY) is analyzed. A novel algorithm known as the artificial electric field algorithm (AEFA) technique is employed to obtain optimal controller parameters. Firstly, a two-area system widely used in literature is considered for proper comparison. The efficacy of 2-DOF TIDF FUZZY controller is confirmed by comparing it with different controllers for the same system. Further, a multi-microgrid system is considered for unified voltage-frequency control. The Automatic Voltage Regulator (AVR) effect states a substantial improvement in system dynamics with the proposed controller. Under different unfavorable conditions like source and load variation, dynamic system performances are studied to enlighten the robustness of the proposed controller. Simulation results elucidate that the proposed 2-DOF TIDF FUZZY controller optimized with the AEFA technique can achieve better system stability in case of any vulnerability. The current study can broaden its scope by integrating a three-area hybrid microgrid system featuring diverse energy storage systems under a unified controller and optimization framework. Evaluating this controller's efficacy will involve addressing system nonlinearities to comprehensively analyze controller performance.

This research is being conducted by Prof. Gyana Ranjan Biswal, Assistant Professor, Electrical and Electronics Engineering.

Design of robust analog integrated circuit based on process corner performance variability minimization

The research team is working on a novel technique of performance optimization along with fabrication process variation tolerance of integrated circuits. It is well-known that the probability of a chip being manufactured under a normal process environment is higher than the other corner process environments since it follows a Gaussian distribution. In this proposed approach Process Corner Performance Variability Minimization (PCPVM) is carried out simultaneously with performance optimization. In PCPVM the statistical performance deviations of the corner cases from the nominal case is minimized by considering the actual SPICE (Simulation Program with Integrated Circuit Emphasis) parameters of different process corners for performance evaluation. The proposed design is made robust by optimizing the circuit performance in nominal case and, also minimizing the difference between chip performances in nominal and worst-case corner environments. This approach is expected to improve the performance of the ICs manufactured even under extreme corner process conditions. The proposed technique is validated in two example cases of a current-starved voltage-controlled oscillator and an Operational Transconductance Amplifier. In the future, Process Corner Performance Variability Minimization (PCPVM) will be employed across different circuits such as PLL and SRAM to develop optimized designs for both PLL and SRAM.

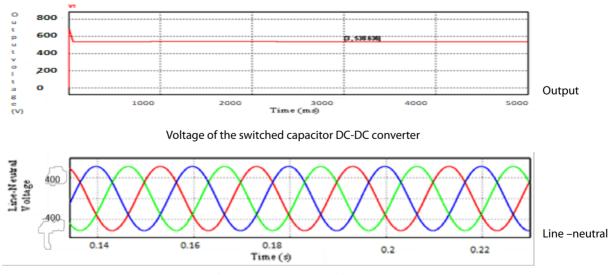
This research is being conducted by Dr. Debasish Nayak, Assistant Professor, Electrical and Electronics Engineering.

Design and Implementation of Grid tied High Step-Up DC-DC Converter with Switched Capacitor

The research team is working on design and implementation of grid tied high step-up DC-DC converter with switched capacitor. The proposed switched capacitor high gain DC-DC converter is modeled and designed so that it can be connected with a 3-phase inverter for Grid synchronization. The simulation model of the proposed converter is done using Power Simulation (PSIM) Software and also the three-phase inverter with Sinusoidal Pulse Width Modulation (SPWM) technique is modeled using this software. For grid synchronization, the SPWM method was used because the phase angle & frequency at the inverter output match the grid. An LC filter was also designed to remove the harmonics of the output voltage during grid synchronization. A high voltage gain of 13 is obtained for different input voltages, hence can be used for high voltage applications. Here, a DC voltage of 40V was obtained from a solar PV module which was stepped up by the proposed capacitor switched DC-DC Converter to 538V. This output voltage was applied to the inverter and three phase line was obtained to neutral voltage of 415 V which can be used with the grid tied system. With the variation of load and input voltage the efficiency of the proposed converter was now found to be 96%, which provided high efficiency and good voltage regulation.

A significant step-up voltage gain is attained by the suggested converter by adding two capacitors and two diodes to the coupled inductor's secondary side. Two capacitors can be parallel-charged and serial-discharged using the connected inductor. But the connected inductor's leakage inductor could result in significant power loss and a spike in voltage at the switch. To clamp the voltage level of the main switch and recycle the energy from the leakage inductor, a passive clamping circuit is therefore required. A 3-phase inverter requires a certain voltage, which is provided by a DC-DC converter. A Novel high-step-up DC-DC converter is required for this. The idea is to utilize two capacitors and a single connected inductor. To generate a large step-up voltage gain, the two capacitors are charged in parallel during the switch-off time and discharged in series during the switch-on period by the energy stored in the connected inductor. A passive clamp circuit is also used to recycle the linked inductor's leakage-inductor energy. As a result, the main switch experiences less voltage stress.

This proposed converter can be used with low voltage PV system for grid synchronization with the use of inverter. In future a controller can be designed to maintain a constant output voltage from the DC -DC converter, essential for intermittent sources like PV. The resulting high voltage output can then seamlessly facilitate grid synchronization.



Voltage of inverter output with LC filter

This research is being conducted by Dr. Lopamudra Mitra, Associate Professor, Electrical and Electronics Engineering.

STUDENT ACHIEVE<u>RS</u>

Silicon students selected in the top ten teams of Odisha Startup Yatra 2023

Two teams from Silicon were selected among the top ten teams for their ideas in the Odisha Startup Yatra 2023 organized by the Government of Odisha on 29 January 2024 at O-Hub, Bhubaneswar. Shreeman Debasmit (CST, 2024) and Dwarikanath Choudhary (CSE, 2024) shared their project in the field of aerial vehicles presenting a new generation of vertical take-off and landing craft with rotating flaps and wings. Their technology, which promises to revolutionize traditional aircraft design, received the highest score in the event. Samarpita Nayak (CSE, 2024) and Swayamsiddha Mohanty (CST, 2024) presented their idea for a ZenCharge EV charging Station with a cafe and resting area on National Highways and public places for travellers. Each team won a cash prize of INR three lakh for being selected among the top ten ideas. The Startup Yatra initiative of the state government encourages innovation





culture among the students and provides a platform for their ideas to grow. The creative solutions put forth by the young minds showcase Odisha's enormous talent pool and the state's potential to become a significant participant in the start-up arena. Our students competed against 36,000 participants from diverse educational institutions across Odisha who presented 4,400 innovative ideas to achieve this milestone.





Ardhendu Mishra from the B.Tech. ECE batch of 2023 received the gold medal in Data Analytics Training organized by the Odisha Upskilling and Placement Program

Ardhendu Mishra, from the B.Tech. Electronics and Communication Engineering (ECE) batch of 2023 received the Gold Medal for being the top achiever in Data Analytics Training using the latest industry technologies - Snowflake and Power BI at Odisha Upskilling and Placement Program organized by the Government of Odisha in collaboration

with Tech Mahindra. He received the Gold Medal and Certificate of Training from the Hon'ble 5T Chairman Shri. VK Pandian on 12 March 2024 at the Training Convocation Ceremony held at Kalinga Stadium, Bhubaneswar. Ardhendu is currently working as an Associate Software Engineer at Tech Mahindra.

Debanwita Mahato placed @Headout with 18 LPA



Debanwita Mahato CSE 2024

Debanwita Mahato (CSE, 2024) has been placed as a Software Development Engineer at Headout with a package of 18 LPA. Prior to this, she was working as an intern with Headout during her 7th semester Practice School (PS) with a stipend of 60K per month. During her internship, she was part of diverse web design and development ventures encompassing UX research, data-driven experiments, and web and app development projects. Beginning with setting up a low-code framework to designing experimental websites at low cost, she has worked with various tools and libraries including Next.js, React Native, Framer, Rive, etc.

Practice School (PS) selectees with a stipend between 15K – 35K per Month

PWC@35κ



Sonali Dash CEN 2020-24



Pratyusha Priyadarshini CSE 2020-24



Subham Sabat CSE 2020–24



Jyotishree Pradhan CE 2020–24



Kumar Jijnasu CSE 2020–24



Harsh Agarwal CSE 2020–24

Kristellar Aerospace@35K



Manisha Choudhury CEN 2020–24



Priyanka Mohakud CST 2020–24

PCON UTILITIES@25K



Anwesha Rath CEN 2020-24



Subhashree Naik CSE 2020-24



Shivani Senapati CSE 2020–24



Nibedita Satapathy CST 2020–24



Tatsat Mohanty CEN 2020-24



Sumit Kumar Dhal CSE 2020–24

Spikewell@20K



Nirmal Kumar CSF 2020-24



Navesh Keshari Khatoi CSE 2020-24



Priyansu Nayak CST 2020–24



Mukul Nayak CSE 2020–24



Abinash Samamtaray ECE 2020–24



Shubhadeep Dash CSE 2020–24

CAT 2024



Aditya Sarkar EEE, 2020-24

Aditya Sarkar (EEE, 2020-24) has secured 95.4 percentile in CAT 2024. Aditya's domain of interest in engineering lies in circuit theory and power electronics. His hobbies include cooking and playing cricket.



Payal Pani CSE, 2020-24

GATE 2024

Payal Pani, (CSE, 2020-24) has secured an AIR 820 in GATE 2024. Her expertise lies in cloud computing, AWS, DevOps, Machine Learning, and Artificial Intelligence. She likes to paint in her free time.

Achievers @IIIT Bhubaneswar's Advaita

Winners of Hackfest-Team Genesis



Swastik Nayak CSE 2021-25



Priyanshu Mallick CSE 2021-25



Chandan Kumar Nayak CSE 2021-25



Anshuman Nayak CSE 2021-25



Badal Samal CSE 2021-25

1st Runners-up in Line Follower Event-Team Blessings



Priyabrat Omm Kumar CST 2022-26



Kalinga Krishna Sahoo EEE 2021-24

Achievers @XIM MUN 2024



Namrata Mishra CST 2020-24 Vice Chairperson, United Nations Human Rights Council (UNHRC)



Subhojeet Biswas ECE 2022-26 High Commendation, United Nations Human Rights Council (UNHRC)



Sneha Sruti Sahu CSE 2021-25 Best Reporter, International Press

Achievers @IIT Bhubaneswar MUN 2024



Amlan Tripathy
CEN 2023-27
Special Mention, All India
Political Parties Meet (AIPPM)



Sneha Sruti Sahu CSE 2021-25 Special Mention, International Press

Woman Achiever 2024

Namrata Mishra CST 2020-24





INDUSTRY INTERFACE CELL

Placement Highlights

The Industry Interface Cell (II Cell) at Silicon University has accelerated its placement activities to facilitate more job offers for the students of the 2024 graduating batch. In this quarter, over 15 companies visited our campus for placement activities, bringing the total to more than 44 companies so far. Till date, 60% of the eligible students have been placed in different companies. These companies have selected students from our campus by offering them salaries in the range of 3.6-18 LPA. Headout has offered the highest package of 18 LPA.

Top recruiting companies include:

Acorn Globus Eximietas Kavnes Rumango Surya Digital **ApMoSys** Genpact Movidu Tech Sanmina Tech Mahindra **PCON UTILITIES** SAP Labs Vodafone Idea Cozentus Haber CoreFL PwC. Sevya IT **Xeedo Technologies** Headout Deloitte Incture Ovantel Spikewell

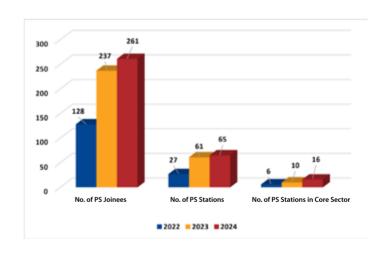
Practice School Highlights

- A total of 224 students from the 2024 graduating batch have joined more than 50 companies in their 8th semester for the Practice School (PS) program
- More than 70% of the selected students are getting a stipend in the range of 15K 35K
- Majority of the students will receive their pre-placement offer after successful completion of their PS program

Practice School (PS) - Three Year Snapshot

The PS program of Silicon University will be completing three years with the batch graduating in 2024. The PS program was introduced in the year 2021 for the 2022 graduating batch. The PS outcome across the last three years, reveals the institution's adaptability and dedication to prepare the students as per the industry trend.

- The number of students who opted for PS have more than doubled in 2024 as compared to the batch that graduated in 2022.
- The number of PS stations also have more than doubled in 2024 as compared to 2022.
- The number of PS stations in the core sector has increased by almost three times in 2024 as compared to 2022.



The companies who have given PS offers to our students in the 8th semester for the 2024 batch include:

ApMoSys Credore Electroboltz India Pvt Ltd Ernst & Young Glosity High Radius

Inofinity R&D PCON UTILITIES PwC Signicent TPWODL Vodafone Idea ZeonAl

ENTREPRENEURSHIP DEVELOPMENT CELL

The Entrepreneurship Development Cell (ED Cell) and the Institution's Innovation Council (IIC) organized several interesting events in the January-March quarter.



National Start-Up Day

Silicon celebrated the National Startup Day on 16 January 2024. This day marks the inception of the Startup India initiative. It aims to recognize the achievements of Indian startups and promote entrepreneurship among youth. The event featured an expert talk and a quiz. Dr. Mahendra Prasad Agasty, Faculty-in-Charge of the ED Cell and President of the IIC, gave the welcome address. Dr. Sanjay Pattnaik, Co-Founder & CEO of PeopleBetter and former Vice-President of Corporate Strategies and Human Resources at Vedanta, Odisha delivered the expert talk. Dr. Pattnaik is currently associated with Silicon as the Principal Advisor of the Practice School (PS) program and industry collaborations. In his talk, Dr. Pattnaik highlighted the potential of entrepreneurship and encouraged the participants to embrace challenges and think creatively. He also shed light on the complexities of start-up culture,

fostering a sense of determination and resilience. The expert talk was followed by a quiz. The purpose of the quiz was to enhance the participant's understanding of the start-up ecosystem. The participants were asked questions on a variety of subjects including industry trends, technology innovations, entrepreneurial tactics, and successful start-up stories. The quiz was coordinated by Dr. Sanghamitra Das, Assistant Professor, Electronics Engineering. A total of one hundred and twenty students and faculty members enthusiastically attended the event.



Expert talk on 'Process of Innovation Development, Technology Readiness Level (TRL), Commercialization of Lab Technologies and Tech-Transfer'

Silicon organized an expert talk on 'Process of Innovation Development, Technology Readiness Level (TRL), Commercialization of Lab Technologies and Tech-Transfer' was organized on 6 February 2024. The objective of the event was to educate participants on technology development, technology readiness level (TRL), and tech commercialization while instilling within them the innovation and entrepreneurial spirit. The talk was delivered by Dr. Amaresh Panda, a renowned personality in the field of innovation and entrepreneurship.

Dr. Panda is an Intellectual Property & Technology Transfer professional working as the Head of the Regional Technological Transfer Office (RTTO) at KIIT-TBI, the Technology Business Incubator of KIIT University. He has fifteen years of valuable experience in technology transfer, portfolio management, and intellectual property. Dr. Panda centered his discussion around three primary pillars, namely, technology commercialization, TRL (Technology Readiness Level), and innovation development. He elaborated on these concepts from the perspective of entrepreneurship and emphasized their significance in problem-solving. A total of seventy students actively participated in the session. The talk was followed by an interactive session where the students discussed their queries with the expert.



Dr. Anita Mohanty, Associate Professor, Electronics Engineering (EE) was honored with 'The World Class Educators Honors-23' award in the category 'The World Class Researcher'. The World Class Educators Honors is for incredible educators all over the world who are committed to excellence in the education field. It is given across three categories- academicians, researchers, and scholars. The winning candidates also get a chance to be listed in the Record Owner- world record list for their outstanding innovative ideas and achievements.

Dr. Pamela Chaudhury, Senior Assistant Professor, CSE, was invited as the Session Chair for the second IEEE sponsored 'International Conference on Advancements in Smart, Secure and Intelligent Computing; held at KIIT University Bhubaneswar from 27-29 January 2024. She chaired the session on 29 January 2024.

Dr. Pradyumna Kumar Tripathy, Associate Professor, CSE, was invited as the Session Chair for the fourth IEEE sponsored 'International Conference on Emerging Systems and Intelligent Computing' (ESIC 2024) held at KIIT University Bhubaneswar from 9-10 February 2024.

ALUMNI BUZZ

Silicon alumni actively participate in mentoring current students, facilitating internships, careers, and job placements for graduating students, as well as giving insightful lectures.

This quarter, our alumni from the B.Tech. Electronics and Communication Engineering (ECE) and Electronics and Instrumentation Engineering (EIE) graduating batches of 2023 actively participated in organizing Nirman 3.0. Papun Kumar Jena, Graduate Engineer Trainee at Vodafone Idea, Rudra Narayan Sahu, Design Engineer at CoreEL Technologies, Aditya Sahu, Graduate Engineer Trainee at HCLTech, Adarsh Kumar Das, Graduate Engineer Trainee at HCLTech, Soubhagya Nayak, Assistant System Engineer Trainee



at TCS, Binayak Das, Associate Engineer Trainee at LTTS and Biswajit Parida, Business Analyst Trainee at In2IT Enterprise Business Services, played crucial roles in event organization. They mentored the student groups to design and present their projects. Furthermore, they utilized their industry skills to enhance marketing strategies and ensure a smooth experience for attendees. Their connections in the industry helped secure partnerships, sponsorships, and guest lecturers, enriching the event's content and significance.

ALUMNI IN FOCUS



SANTOSH ANAND NAYAK Deputy Manager (Electrical), Odisha Hydro Power Corporation B.Tech. (EEE) 2004 - 2008

Santosh currently holds the position of Deputy Manager (Electrical) at Odisha Hydro Power Corporation, where he leads operations related to hydro generators. His responsibilities encompass the operation and maintenance of hydro generators for high and medium-head generating machines. He specializes in the erection and commissioning of hydro generators, including complete stator building and commissioning of generating units. He also oversees the maintenance of auxiliary equipment such as 165/30 Tons and 150/25 Tons EOT cranes, electrical and mechanical. Furthermore, he has experience in managing drainage and dewatering systems in powerhouses. Currently, he is involved in monitoring a new small hydro project at Mandira Dam in Rourkela. He also played a crucial role in the construction and commissioning of the 150MW stator for the Upper Indravati Project, the highest installed capacity hydroelectric machine in Odisha.



RAJESWARI MOHANTY Team Manager, Amazon Web Services B.Tech. (AEI) 2013-2017

Rajeswari is currently leading in the position of Team Manager at Amazon Web Services (AWS). She has been with the company for seven years and has continuously advanced in her position. Specializing in Retail and Cloud computing, she leads IMPAC, the global process improvement program. She is also a certified Six Sigma Yellow Belt. Her efforts make AWS's operations seamless, contributing greatly to the company's success. Her dedication and leadership exemplify her vital role within the company.



ANWESHA MALLICKConsultant, Deloitte Consulting USI
B.Tech. (ECE) 2013-2017

Anwesha is currently working as a consultant at Deloitte Consulting USI, specializing in SuccessFactors and BODS. Her responsibilities revolve around collaborating with clients to design HR modules, streamline payroll systems, and optimize staffing processes through automation. She pursued her MBA in HR from XIMB after completing her B.Tech. from Silicon. Outside of work, Anwesha enjoys immersing herself in books, discovering new cafes and restaurants, and embarking on treks to unwind.



SOUMYA SNEHASHIS Senior Member of Technical Staff, Salesforce Inc, San Francisco B.Tech. (EIE) 2004 - 2008

Soumya is currently working at Salesforce's Industries division as a member of the Release Management team. His role involves overseeing the rollout of Revenue, Health, and Non-Profit Cloud software releases to global clients. With a rich background spanning 15 years in the software industry, he brings expertise in Java, DevOps, Cloud Infrastructure, and Data Analytics to his work. Notably, he holds two patents in Cloud Infrastructure, granted by the United States Patent and Trademark Office (USPTO). He is slated to pursue a Master's in Business Administration from Haas School of Management, UC Berkeley, in 2024. Outside of the tech world, he finds joy in playing chess, exploring new destinations, and indulging in his passion for photography.

Alumni Desk

Visit our Alumni Portal at https://alumni.silicon.ac.in/ & register yourself
E-mail: siliconalumni@silicon.ac.in | Contact: +91 9937289499 | Extn: 352/353/354/356/358



Please send your feedback /suggestions to pcell@silicon.ac.in

Compiled and Published by

Industry Interface Cell Silicon University Silicon Hills, Patia, Bhubaneswar, Odisha, India 751024 Ph: +91 9937289499 Extn: 352 / 353 / 354 / 356 Visit us at: www.silicon.ac.in