

SiliconTech

SILICON INSTITUTE OF TECHNOLOGY, BHUBANESWAR

A QUARTERLY NEWSLETTER

Volume 4 Issue 3 January-March 2023

EDITORIAL

Greetings from SiliconTech!

Time marches on. It appears that we have left covid-related issues behind and have resumed normalcy in almost all aspects of everyday life at the college, including academics. However, the loss of learning and the complacency that set in during the pandemic times are stark reminders of what can happen in a global lock-down, and some after effects linger on.



We have held a number of notable events recently, including seminars and workshops, all conducted in person. This includes an AICTE ATAL-sponsored FDP on IOT for Agriculture and Environment, and a National Seminar on Functional Materials in Emerging Technology (FMET) held together with the Annual Convention of the Orissa Physical Society; FMET featured a number of eminent scientists from the US and India. Among student-organized programs, The SITMUN was successfully held, along with the much-awaited student technical competition NIRMAN, whose second iteration was an even more resounding success. Meanwhile classes, exams and evaluations have all proceeded with clockwork precision, and the seniors are almost ready to graduate.

Placement activities, which have now become year-round, have gone very well with about 75% of the graduating batch having job offers. Practice School, our flagship one-semester training program, has gained prominence with both students and companies alike, and a significant number of our students who have enrolled in it are placed. Core companies have been notably represented this year in the hiring process, which is a welcome addition.

We look forward to a promising year of high achievements by our students, both curricular and otherwise.

Wish you happy reading and hope you enjoy this issue of our Newsletter!

Prof. (Dr.) Jaideep Talukdar
PRINCIPAL

INSTITUTE HIGHLIGHTS



SiliconTech signs MoU with BPUT for CoE in 'Artificial Intelligence for Embedded Systems'

SiliconTech signed a Memorandum of Understanding (MoU) with the Biju Patnaik University of Technology (BPUT) on 14 March 2023 to establish a Center of Excellence (COE) in 'Artificial Intelligence for Embedded Systems' in the SiliconTech campus. The objective of the COE is to encourage advanced research and achieve technical excellence in the field of emerging technologies, while ensuring industry connectivity.



Mr. Abhijit Pati, CEO, BALCO felicitates Practice School Interns

SiliconTech collaborated with Bharat Aluminium Company Limited (BALCO), Chhattisgarh to solve their industrial problems in four identified areas namely, a Smelter Unit, Potline, Rodding, CHP, and CPP. Eight students from the departments of ECE, EEE & EIE worked on projects in these areas under the guidance of faculty mentors and technical experts. Mr. Abhijit Pati, CEO, BALCO, reviewed all the projects and felicitated the eight selected students for their outstanding performance.



NIRMAN 2.0

The SiliconTech Robotics Club and Circuit Club jointly organized NIRMAN 2.0 with the motto 'Rise with Technology' under the patronage of the Student Innovation and Promotion Cell (SIPC) from 15 - 17 February 2023. Mr. Subrata Mohanty, Group General Manager (Systems), NALCO was the chief guest of the event. He inaugurated the event and delivered a talk on 'Role of an Engineer in Current Technology'. A total of 720 students across the state participated in various events like Line Follower, Robo Race, Hacknation, and Idea Presentation.

NEWS AND EVENTS



OPS - FMET Meet

The BSH Department collaborated with the Orissa Physical Society (OPS) to organize the 5th National Seminar on Functional Materials for Emerging Technology (FMET 2023) and the 39th Annual Convention of OPS from 11 - 12 February 2023. Prof. Karuna Kar Nanda, Director, Institute of Physics (IOP) was the event's chief guest. Prof. S. D. Mahanti from Michigan State University, USA and Prof. Purusottam Jena from Virginia Commonwealth University, USA delivered two memorial lectures. Prof. Sashi Satpathy, University of Missouri, USA, Prof. Manoranjan Kar, IIT Patna, Prof. Shikha Varma, IOP, BBSR and Prof. Subhankar Bedanta, NISER, BBSR spoke in the FMET seminar. OPS presented the Young Scientist Awards for the years 2021 and 2022 to Dr. Atal Bihari Swain and Dr. Arvind Khuntia respectively.



STTP on 'Accreditation Process and NBA'

SiliconTech's Internal Quality Assurance Cell (IQAC) collaborated with the National Institute of Technical Teachers Training and Research (NITTTR), Kolkata to organize a five-day Short Term Training Programme (STTP) on 'Accreditation Process and NBA' conducted by Dr. Urmila Kar, Professor, Education and Management, NITTTR from 17 to 21 January 2023. Prof. Debi Prasad Mishra, Director, NITTTR, Kolkata virtually joined as the chief guest of the STTP.



ATAL FDP on 'IoT and Agriculture for Environment'

The Department of CSE organized a two-week ATAL (AICTE Training and Learning Academy) FDP on 'IoT and Agriculture for Environment' in the hybrid mode from 26 December 2022 - 6 January 2023. Fourteen sessions were conducted by experts including Prof. Suraj Sharma from Guru Ghasidas Vishwavidyalaya Central University, Chhattisgarh, Prof. Ashish Khanna from MAIT (Manufacturers' Association of Information Technology), New Delhi, Prof. Suvendu Rup from NIT, Raipur, Prof. Abhishek Swaroop from Bhagwan Parshuram Institute of Technology, Delhi, Prof. Siba Kumar Udgata, University of Hyderabad, Telangana and Prof. Siba Prasad Adhikary, Former Vice Chancellor, Fakir Mohan University, Balasore. Mr. Mukesh Singh from Robogenesis conducted three hands-on sessions.



Invited Talk on 'AI for Everyone'

The Department of EEE collaborated with the IEEE Student Chapter to organize an invited talk on 'AI for Everyone' by our alumna Swaroop Mishra (EEE, 2010-2014) on 21 January 2023. Swaroop has completed his Ph.D. from Arizona State University, USA, and recently joined Google Brain as a Research Scientist. He discussed the application of ML in solving real world problems and inspired the students to do higher studies.



International Women's Day 2023

The Social Awareness and Gender Equality for Women (SAGE-W) Cell at SiliconTech in association with the Internal Complaint Committee (ICC) organized the IWD celebrations on 25 March 2023. Ms. Dikhya Tiwari, Senior Associate Editor, My City Links and Mr. Satyabrata Sanu Ratho, Director, PNV Group & Co-Founder, Bocca Café joined us as the guest speakers to speak on this year's campaign theme, '#Embrace Equity'. Invited guests from Google's Women Techmakers Community including Rhiti Chatterjee Bose, Tanistha Panda, Adyasha Mohanty, Arpita Priyadarshini Sahoo, and Sharmistha Panda joined us on 26 March 2023 to share their success stories and inspire women for achieving greater milestones.



SITMUN 2023

SiliconTech organized the 5th edition of the Silicon Institute of Technology Model United Nations (SITMUN 2023) from 24-26 February 2023. The conference had three committees– United Nations General Assembly Disarmament and International Security Committee (UNGA DISEC), United Nations Human Rights Council (UNHRC), World Health Assembly (WHA), and one international press. A total of 160 delegates from different universities and colleges across India attended the conference.



74th Republic Day

SiliconTech celebrated the 74th Republic Day on 26 January 2023 to foster the spirit of patriotism and nationalism among its staff and students. The Republic Day celebrations began with the unfurling of the national flag by Dr. Jaideep Talukdar, our Principal and singing of the national anthem by the audience. Our students also performed various cultural acts to add vibrance to the celebrations. Later in the day, the members of Zeal club went to the Godibari village located near Chandaka Reserve Forest to donate clothes, food, and stationery materials among the villagers.



Young India Challenge

SiliconTech collaborated with the Human Circle, New Delhi to organize the 12th edition of the Young India Challenge on 25 and 26 March 2023. Mr. Kamal Seth, Global Palm Oil Director, WWF (World Wide Fund for Nature), Ms. Wioleta Burdzy Seth, a coach and trainer from Poland, Mr. Punyasloka Panda, Founder, YfS and TasQ and Ms. Archana Soreng, member of the UN SG's Youth Advisory on Climate Change delivered expert talks. Manisha Priyadarshini Sahoo (CSE, 2020-2024) and her team 'One Piece' won the challenge and received the seed amount of one lakh rupees. Mayamugdha Mohanty (ECE, 2020-2024) was chosen as one of the speakers for the session 'You are the Story'.



Aurobindo Misra Memorial Quiz

Silicon Quiz Club in association with the Silicon Photography Club organized the Aurabinda Misra Memorial Quiz 2023 on 25 March 2023 to provide the seasoned quizzers of the day a platform to unleash their quizzing genius and win various prizes. The quiz was conducted by quiz master Toyada Pattnaik, a SiliconTech alumnus from the B.Tech. batch of 2021. The winners were Krishna Aditya Mohanty from NIT, Rourkela and Abhishek Rath from National Law University of Odisha. Subham Jha & Ronisha Das from Accenture were the 1st runners up and Arpan Chakraborty & Divyanshu Mohanty from NIT, Rourkela were the 2nd runners up.



Dare to be Aware @ Awareness Program

The YfS (Youth for Sustainability) Silicon Chapter organized an awareness program entitled 'Dare to be Aware' on 3 March 2023 to observe the 'National Safety Day' and 'World Wildlife Day'. Various competitions were held on this occasion like a wildlife photography contest, a calligraphy contest, and a debating contest titled duo showdown. Mr. Prayag Samal, Entrepreneur, and Photographer at National Geographic Traveler India was the expert judge for the wildlife photography and calligraphy contest. The 'National Safety Day' is celebrated annually on 4 March and the 'World Wildlife Day' is a UN International Day celebrated annually on 3 March.



Quizient 2023

Silicon Quiz Club in association with the Silicon Photography Club organized a quiz competition titled 'Quizient 2023' on 1 March 2023. The theme for 'Quizient 2023' was 'Sports and Entertainment'. The quiz was held in two rounds - prelims and final. Six out of twenty-five teams qualified for the final round. Swaraj Mohapatra and Biswanath Pattnaik from the B.Tech. 2026 batch were the winners. The runners-up were Ashutosh Tiwari and Prakash Kumar from the B.Tech. 2025 batch.



Quizanna 2023

The Silicon Quiz Club in association with the Silicon Photography Club organized 'Quizanna 2023', an inter-school quiz competition on 21 January 2023. The quiz was held in two rounds - prelims and final. Six out of thirty teams qualified for the final round. DAV Public School, Unit-8, Bhubaneswar emerged as the winner. Ravenshaw Higher Secondary School, Cuttack won the 1st runner-up prize and Mother's Public School, Bhubaneswar won the 2nd runner-up prize.



Talk on 'Intergenerational Solidarity'

SiliconTech collaborated with Smart City Limited, Bhubaneswar to organize an invited talk on 'Intergenerational Solidarity' by Dr. Pratap Kumar Rath, former Professor, Centre of Advanced Study in Psychology, Utkal University on 6 January 2023. The event was conducted to create awareness about the changing patterns of parenting across the generations, bridging the generation gap and discussing ways to establish solidarity. 90 students and faculty members attended the event.



Industrial Visit to Sky Rider Institutions

The Department of EEE in association with IEEE Student Chapter organized an industrial visit for the third year EEE students to the Sky Rider Institutions for Advanced Skill & Research, Bhubaneswar on 11 February 2023. The experts from Sky Rider Institutions explained about Electrical Vehicle (EV) design and EV technology. The students visited the EV assembly, body manufacturing, and iron/plastic molding sections, following all safety precautions. 49 students and faculty members benefitted from this visit.



Plastic-Free Campus @Awareness Program

The YfS (Youth for Sustainability) Silicon Chapter collaborated with Silicon Music Club and Theatre Club to organize an awareness program on 'Plastic Free Campus' on 28 January 2023. Our Director, Dr. Saroj Kanta Misra and Dr. Ramaprasad Panda, Professor, EEE delivered two inspiring speeches on the theme. Our students raised various slogans to create awareness. The members of the Theatre Club and YfS chapter presented a drama and the students of Music Club performed a thematic dance.



Staff Events

The Staff Welfare Committee (SWC) organized the Annual Staff Award function on 4 March 2023. Mr. N. G. Dhall, our Trustee, addressed the faculty and staff members on the occasion. SiliconTech employees were recognized for their long service and PhD completions. The SWC also organized a variety of indoor and outdoor sports competitions for staff members. It also organized a dental check-up and an eye check-up camp for the staff.

NOTE: For further details on any news item, visit <https://silicon.ac.in/news/>

EMPLOYEES IN NEWS



Mr. Suwendu Chandan Nayak, Senior Assistant Professor, CSE, received the best paper award for his research on 'Weighted Clustering Ensemble with Base Clustering Frequency and Diversity' in the 1st International Conference on 'Futuristic Computation Techniques (ICFCT-2022)' organized by the Dept. of Computer Application, Panipat Institute of Engineering and Technology, Haryana.



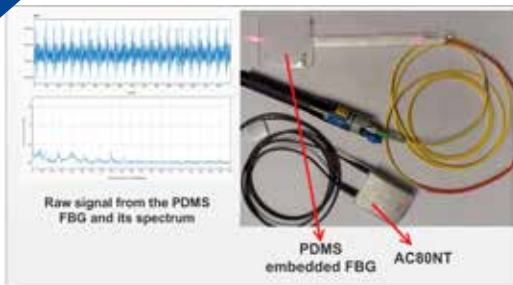
Dr. Ramaprasad Panda, Professor, EEE delivered two technical talks in the 'Retailer Training Program (RTP)' organized under the Standards & Labelling Program of the Bureau of Energy Efficiency (BEE) sponsored by the Ministry of Power, Govt. of India at Angul on 10 March 2023. Dr. Panda also delivered a talk on 'Capacity Building Workshop for MSMEs on Energy Efficiency (EE) Financing in Odisha' on 3 March 2023.



Dr. Saswati Jena, Assistant Professor, BSH, spoke on 'Self-Acceptance, the step forward for good mental health and wellbeing' in the 'SAHYOG' program under 'MANODARPAN' on 24 March 2023. 'MANODARPAN' is a joint initiative by the Ministry of Education (MoE), Govt. of India and NCERT, New Delhi.

RESEARCH AND PUBLICATIONS

Scopus / SCI Indexed journals: 6
Conference Proceedings: 4
Book Chapters: 1
Patents: 1



Industry-grade high-precision FBG sensor for vibration monitoring

The SiliconTech Optical Sensor research group has achieved a new height in the design of a PolydimethylSiloxane (PDMS) embedded FBG sensor for vibration monitoring applications. The designed sensor is flexible enough for easy installation on any surface. This PDMS-embedded FBG is designed, fabricated, and tested at the laboratory with a state-of-the-art facility. In a similar context, an industry standard high precision vibration sensor

(AC80NT, make: Somni Netherland, wave length: 1532nm-1540nm, sensitivity: 12 pm/g, measurement range: +/-200g, bandwidth: 1-2000 Hz, resonance: >2700Hz) is added to the optical sensor facility. The vibration sensitivity of the PDMS-embedded FBG is experimented with and calibrated using the AC80NT industry-grade vibration sensor. A cutting-edge Ibsen I-MON high-speed FBG Interrogator interfaced with the National Instruments LabVIEW application is used to acquire real-time signals from the PDMS-embedded FBG and AC80NT sensors.

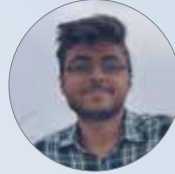
Sanghamitra Das, Tarapasanna Dash, **Biswajit Baral**, **Sudhansu Mohan Biswal**, Devika Jena and Eleena Mohapatra collaborated to publish a book chapter entitled *Analytical modelling of nanoscale advance devices and their reliability aspects* in *Nanoelectronics: Physics, Materials and Devices*, Elsevier. The chapter focuses on the analysis of the hot carrier degradation (HCD) in bandgap engineered strained-Si n-MOSFETs through simulation.

For details, visit <https://www.sciencedirect.com/science/article/abs/pii/S09270268232918329000117?via%3Dihub>

STUDENT ACHIEVERS



Smrutiranjana Dalai
CSE 2019-23, AIR - 250



Vishwa Lochan Pathak
CSE 2019-23, AIR - 744

GATE 2023



Digbijayee Nayak
CSE 2019-23, AIR - 299



Pratyasa Ray
CSE 2019-23, AIR - 744

Practice School (PS) selectees with stipend between 12K – 25K per month

SimplifyVMS @25K



Bommana Aditya
ECE 2019-23



Ashutosh Mallick
ECE 2019-23



Harsh Kumar
ECE 2019-23



Satish Ranjan Das
ECE 2019-23

upGrad @25K



Sabyasachi Mitra
ECE 2019-23



Nishtha Das
EEE 2019-23

Transporeon @25K



Shubham Kumar Singh
ECE 2019-23



Raviranjana Kumar
CSE 2019-23



Ushmita Dutta
CSE 2019-23



Nandita Sahoo
CSE 2019-23

Cozentus @12.5K



**Odisha Queen
2022**
@First Runner-Up



Sonam Acharya
ECE 2019-23

**Best Innovative
Idea, Young India
Challenge**



Manisha Sahoo
CSE 2020-24
Leader of winning team,
One Piece

**Third Prize, ADVAITA
(Line Follower),
IIIT Bhubaneswar**



Priyabrata Omm Kumar
CST 2020-26
&
Jaganath Patra
CST 2020-26

Siliconites win prizes in Start Up Mela 2023

Start Up Mela 2023 was organized by Start Up Odisha on 15 & 16 January 2023. Biswajit Panda (CEN) and Shubham Mohanty (CEN) won the first prize in Group Discussion. Girish Bhardwaj (CST) and Ankit Kumar (CST) won the third prize in Group Discussion. Rohit Kumar (CSE) and Ankit Kumar (CST) won the third prize in the Start-Up quiz competition. Shekhar Kumar (CST) won the quiz competition conducted for the audience. All the winners are from the 2025 graduating batch.



Siliconites win inter-college sports awards

Siliconites won several inter-college competitions in Orion 2023 the annual fest of Sri Sri University. Our football team won the Champions' Trophy and our Basketball team won the Runners-up prize. Swarnali Roy (ECE, 2022-2026) became the champion in Badminton Singles (Women) and Ayush Sarangi (EEE, 2020-2024) became the runner-up in Badminton Singles (Men). Our team won the Gold medal in 4 x 100 m relay race (Men). Pratyush Prakash Singh (CSE, 2022-2026) won the Silver medal in 100 m race (Men).



SiliconTech's music band 'Samarpan' wins prizes

SiliconTech's music band 'Samarpan' won the 'Reverb-War of Bands' organized in Orion 2023, the annual fest of Sri Sri University, Cuttack. Our band became the runner-up in 'SONIX- THE BATTLE OF BANDS' held at the Xamboree fest organized by XIM (Xavier Institute of Management) University. 'Samarpan' also won the 'Battle of Bands' at the TVISHA fest organized by NISER, Bhubaneswar.

ENTREPRENEURSHIP DEVELOPMENT CELL



'ANVESHAN', a workshop on problem-solving and idea generation'

SiliconTech's Entrepreneurship Development Cell (ED Cell) organized 'ANVESHAN', a workshop on problem solving and idea generation on 21 January 2023. The objective of 'ANVESHAN' was to train the students to identify real-life problems and



ideate to propose solutions to these problems. The workshop comprised of two sessions conducted by Mr. Bhagabati Charan Patnaik, CEO, Atal Incubation Centre, C.V. Raman Global University and Mr. Chittaranjan Patnaik, former Regional Head, Entrepreneurship Development Institute of India (EDII) Ahmedabad. Mr. Bhagabati Charan Patnaik discussed idea generation techniques used for finding the solution to a problem. Mr. Chittaranjan Patnaik delivered a talk on 'Entrepreneurship Skill, Attitude and Behaviour Development' and discussed the fifteen competencies required to be a successful entrepreneur.

INDUSTRY INTERFACE CELL



Placement Highlights (as on 31 March 2023)

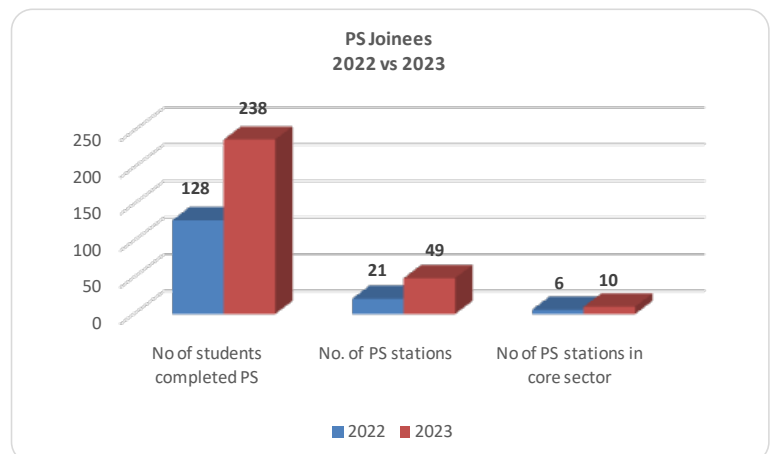
- 78% of UG viz., B.Tech. students and 48% of PG viz., MCA and M.Sc. Data Science students have been placed with at least one offer in the salary range of 3.5 LPA - 20 LPA.
- 60 companies from IT Consulting, Product development, Telecom, Core Engineering and Salesforce sectors have completed their recruitment drive.
- Top recruiting companies which visited this quarter include

Blue Star	IBM	Sanmina Corporation
Cozentus Technologies	JSW	SearchingYard Software Group
FSS	Marquee Semiconductor	Sevya IT
Genpact	Mindgraph Technologies	SiliconTechLab
GoWebbo & Company	Modak Analytics	Simplify VMS
HCL Technologies	PwC	Workz

- Some of these companies will also offer internships to the selected students in their 8th semester.

Practice School (PS) Highlights for 2023 graduating batch

- 86% increase in the number of 2023 batch students who have opted for PS either in the 7th or 8th semester in comparison to 2022 batch. 238 students from 2023 batch have either completed their PS in the 7th semester or are continuing in the 8th semester as compared to 128 students who have completed PS in 2022 batch.
- 133% increase in the no. of PS stations in 2023 as compared to 2022. 49 companies have selected our students under our PS program in 2023 as compared to 21 companies in 2022.
- 66% increase in the no. of core PS stations in 2023 as compared to 2022. 10 companies from the core sector have selected our students under our PS program in 2023 as compared to 6 core companies in 2022.



- Some of the PS stations who have offered 6 months internship for the 2023 graduating batch during their 8th Semester with a stipend in the range of 10K - 50K include

Accolite
Argus News
Argusoft
Blue Star
CAW Studios

Cozentus
DeepSource
Deloitte
GoWebbo & Company
Hughes Systique
Innova Solutions

Logit One
Marquee Semiconductor
Mentography
Mindgraph
PHYTEC
Pratishthan Software

prelabs
Rumango
SearchingYard
Sevya IT
SimplifyVMS
Spikewell

Squbix
Suryasoft
Teleglobal
upGrad
ValueLabs



ALUMNI BUZZ



Swaroop Mishra, a SiliconTech alumnus from B.Tech. EEE (Electrical & Electronics Engineering) batch of 2014 has recently joined Google Brain as a Research Scientist. Swaroop has completed his Ph.D. from Arizona State University, USA in Artificial Intelligence (AI). Prior to this, he worked as an intern with Google-AI, Microsoft Research and Allen AI. Swaroop has also worked as a Technical Consultant with the Ministry of Electronics and Information Technology, Government of India, and as a software engineer in MathWorks.

ALUMNI IN FOCUS



GOURGOBINDA S. ACHARYA

Agile Project Manager, TCS
B.Tech. (E&T) 2004-2008

Gourgobinda is currently working as an Agile Project Manager for leading banking projects in Tata Consultancy Services (TCS). He has more than 14 years of work experience as a developer, scrum master, and project manager in leading organizations like AtoS, Worldline Global Service and TCS. He has managed global projects by integrating business units and led cross-functional teams to provide agile-based project deliverables by adhering to Scrum methodologies and processes. He spends his leisure time gardening, reading historical and social literature, and pursuing certification courses.



K.V.D. PALLAVI

Business Intelligence Analyst, TESLA
B.Tech. (EEE) 2016 - 2020

Pallavi is currently working as a Business Intelligence Analyst with TESLA. Prior to this, she worked with TCS as a Data Engineer. She has completed her Master's in Finance from the Carlson School of Management, University of Minnesota. She has also worked as an intern with TESLA and Ernst & Young. Pallavi has a keen interest in research. She is interested to work on sustainability in poorer countries based on their carbon credit output.



LIPSA PANIGRAHI

Entrepreneur, ORPHUB Consultancy Services Pvt. Ltd.
B.Tech. (E&T) 2006 – 2010

Lipsa is currently working in her own start-up company, ORPHUB Consultancy Services Pvt. Ltd. in Bengaluru. ORPHUB is a B2B business provider which offers a wide range of specialized business process outsourcing solutions to its Corporate Clients and Associates that are designed to meet rapidly increasing IT demands. Prior to starting her company in 2016, she worked with Tech Mahindra for six years in Johannesburg, South Africa. At present, she has expanded her reach to Johannesburg, London, Malaysia, and Singapore and is planning to start a new office at New York. She has also started an NGO, 'Selfeconomic Federation' which is planning a rural tourism project to develop 533 villages located in 16 Indian states.



VIKASH KUMAR BHARDWAJ

Research Scholar, IIT (BHU)
B.Tech. (ECE) 2014-2018

Vikash is pursuing a dual degree in M.Tech. and Ph.D. from IIT (BHU), Varanasi. Prior to this, he worked with PerfectVIPs as an ASIC verification engineer. His job role included building verification components, constrained-random testing, end-to-end system testing, and verification closure. He successfully cleared GATE 2020 with AIR 325 and got into research. His area of interest lies in communication engineering with a special focus on IoT (Internet of Things), metamaterials, and medical cyber-physical systems. During his leisure time, Vikash likes to travel and explore new places.

Alumni Desk

Visit our Alumni Portal at <https://alumni.silicon.ac.in/> & register yourself

E-mail: siliconalumni@silicon.ac.in | Contact: +91 9937289499 | Extn: 351/352/353/354/356/358

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

Compiled and Published by

Industry Interface Cell

Silicon Institute of Technology (Autonomous)
Silicon Hills, Patia, Bhubaneswar, Odisha, India 751024

Ph: +91 9937289499 Extn: 351 / 352 / 353 / 354 / 356

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