## **Advisory Committee**

**Prof. Jaideep Talukdar** Vice-Chancellor, Silicon University, Odisha

**Prof. Debabrata Kar** Dean (Instruction), Silicon University, Odisha

**Prof. Ramaprasad Panda** Dean (Student Affairs), Silicon University, Odisha

**Prof. Manoranjan Behera** Dean (Research & Consultancy), Silicon University, Odisha

> **Prof. Saroj Kanta Misra** Advisor, Silicon University, Odisha

**Prof. Chitaranjan Tripathy** Advisor Research, Silicon University, Odisha

**Dr. Saroj Rout** Professor & Chief Mentor, Advanced VLSI Lab, Silicon University, Odisha

Dr. Prakash Kumar Rout Professor & Head, Dept. of EE, Silicon University, Odisha

## **Coordinator**

Dr. Biranchi Narayan Rath Silicon University, Odisha

## <u>Co – Coordinator</u>

**Dr. Sanghamitra Das** Silicon University, Odisha

# **Our Experts**

**Prof. Kunal Pal** Professor, NIT Rourkela

**Mr. Mrinal Das** Head, SLM Hardware Design Group R&D, Synopsys Inc. Bhubaneswar

> **Dr. Niladri B. Puhan** Associate Professor, IIT Bhubaneswar

**Dr. Debi Prasad Das** Senior Principal Scientist, CSIR-IMMT Bhubaneswar

**Dr. Saroj Rout** Professor & Chief Mentor, Advanced VLSI Lab, Silicon University, Odisha

> **Dr. Deepak Nayak** Assistant Professor, MNIT Jaipur

Mr. Rasmi Ranjan Mohapatra Group Director EDAG, Synopsys Inc. Bhubaneswar

> **Dr. Nijwm Wary** Assistant Professor, IIT Bhubaneswar

> **Dr. Pradyut Kumar Biswal** Assistant Professor, IIIT Bhubaneswar

> > **Dr. Priya Ranjan Muduli** Assistant Professor, IIT BHU

**Dr. Suman Samui** Assistant Professor, NIT Durgapur

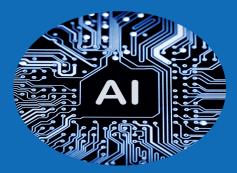
Organizing Committee
All faculty & staff members of EE Department



AICTE Training and Learning (ATAL) Academy Sponsored **One Week Faculty Development Program** on

Al/ML Solutions for Industry 4.0: Applications Spanning from Embedded Systems to VLSI Technology

19<sup>th</sup> – 24<sup>th</sup> Aug, 2024



Organized by The Department of Electronics Engineering Silicon University, Odisha

in association with



### **Objectives of the FDP**

The Faculty Development Program (FDP) aims to equip faculties and research scholars with advanced skills and knowledge in AI/ML integration and Industry 4.0 technologies, particularly focussing on embedded systems and VLSI integration. Through this program, participants will deepen their understanding of these domains, enhance their proficiency in designing embedded systems, and learn to integrate cutting-edge concepts into academic curricula. The program also seeks to foster research collaboration, promote professional development, encourage innovation and entrepreneurship, and emphasize ethical considerations in AI/ML applications. Overall, the FDP aims to empower participants to undertake impactfull research projects, advance their careers, and contribute to the development of AI-driven solutions for industry challenges.

### Outcomes

- Participants will acquire advanced skills and knowledge in Al/ML integration, embedded systems design, and VLSI technology, enabling them to stay updated with industry trends and academic advancements.
- 2. Faculty members will be equipped to integrate cuttingedge concepts into academic curricula, ensuring that students receive relevant and up-to-date education in AI/ML and Industry 4.0 domains.
- 3. Participants will be empowered to undertake highimpact research projects by leveraging AI/ML techniques and advancements in embedded systems and VLSI technology, contributing to the advancement of knowledge in these fields.
- 4. The program will facilitate networking opportunities and collaborative initiatives among participants, fostering interdisciplinary research collaborations and partnerships.
- 5. Participants will gain guidance and resources to support their research endeavors, including opportunities for publication in reputed journals and acquisition of research grants in AI/ML and Industry 4.0-related fields.
- 6. The FDP will support the professional growth of participants, including opportunities for career advancement, skill development, and recognition within academia and industry.
- 7. Participants will be inspired to explore innovative

applications of AI/ML and Industry 4.0 technologies, fostering a culture of entrepreneurship and industry collaboration.

8. The program will emphasize the importance of ethical considerations and responsible use of AI/ML technologies in research, teaching, and industry applications, ensuring societal benefit and inclusivity.

### AICTETraining And Learning (ATAL)

AlCTE is committed for the development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development. The Council understands that there is a need of the day to train the young generation in skill sector and having faculty technicians to be trained in their respective disciplines Training is required for increasing the knowledge and skills of students to make them more employable 40 acquire global competencies. It also transforms them to harmonize with society and most importantly to make them a good citizen of the country. Accordingly it was decided to the opening of AlCTE Training and Learning (ATAL) Academies. As a part of its activities AlCTE Training and Learning (ATAL) Academy will conduct an Basic FDP on Al/ML Solutions for Industry 4.0: Applications Spanning from Embedded Systems to VLSI Technology from 19<sup>th</sup> – 24<sup>th</sup> August 2024.

#### **About The University**

Silicon University, Odisha is a State Private University situated in Bhubaneswar, the capital of Odisha, India. Silicon Institute of Technology, Bhubaneswar, transitioned to Silicon University, Odisha, effective from January 31, 2024. Silicon Institute of Technology was established in in the year 2001 with a mission to provide value based quality technical education. Today the University is recognized as one of the centers of academic excellence with a vibrant research culture. The institute is constantly innovating and improving its curriculum to make the students ready for the demanding corporate world and the untiring effort is rewarded every year with excellent placement of the students in top national and multinational companies. The institution has a think tank comprising academicians, educational entrepreneurs, industry personnel and educationists. The institute is approved by AICTE, has three UG Programs in ECE, EEE and CSE accredited by NBA and ranked in the band 151 – 300 in the Innovation Category by NIRF in 2023.

#### **About The Department**

SiliconTech, the engineering institute of Silicon University, consolidated the Department of Electronics Engineering (EE) in 2023 by amalgamating the erstwhile departments of Electronics and Communication Engineering (ECE) and Electronics and Instrumentation Engineering (EIE), established in 2001 and 2003, respectively. This consolidation aims to streamline academic offerings and foster interdisciplinary collaboration. The department is committed to providing a cutting-edge platform equipped with modern tools to tackle contemporary challenges and anticipate future developments in electronics and allied domains. Offering a comprehensive range of undergraduate and postgraduate programs, including B.Tech. in ECE and EIE, as well as specialized M.Tech. and M.Sc. programs, the Department caters to diverse interests within the field. Emphasizing a broad spectrum of fundamental concepts and practical skills, students delve into areas such as electronic circuits, communication systems, VLSI design, embedded systems, and industrial automation. By nurturing a researchintensive environment and cultivating partnerships with industry stakeholders and research institutions, the EE Department encourages innovation and entrepreneurship in electronics-related endeavors. Comprising seventeen stateof-the-art laboratories, the department provides students and faculty with exceptional facilities for hands-on experimentation, simulation, and prototyping across various domains, including communication engineering, microelectronics, digital signal processing, VLSI, and instrumentation design.

# **Resource Persons**

The sessions will be handled be the experts on the subject from industry and other institutions of repute.

#### Who Can Apply?

Registration is FREE and open for all Faculties of all disciplines from AICTE approved institutions.

### **Registration Details**

1. All the participants are requested to register using the following link:

#### https://atalacademy.aicte-india.org/login

2.	For more information, please contact:	
	Dr. Biranchi Narayan Rath	9861105365
	Dr. Sanghamitra Das	9437386488
	Dr. Amiya Bhusana Sahoo	9040400767
	Mr. Amulya Kumar Roul	9897647889
	Mr. Dhananjaya Tripathy	7504246759