ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)
ON
AI- Driven Semiconductor Design and Development for Next Generation Computing Systems
(19th August– 29th August, 2024)

Organised by

Electronics & ICT Academy, NIT Warangal

In Association With

Department of Electronics and Communication Engineering

K.S.Rangasamy College of Technology, Tiruchengode, Namakkal

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:

This FDP covers semiconductor devices, systems, applications, interoperability, standards, modeling, design, simulation, analytical methods, and health and safety applications. It aims to unite professionals and academics to share knowledge and address limitations in semiconductor systems. Participants learn about semiconductor devices, silicon's interior workings, and their development for everyday life. AI algorithms can optimize the design process for semiconductor chips by analyzing large amounts of data and identifying performance patterns. AI can also aid in customization, generating designs that meet specific computing tasks, making them suitable for emerging applications like edge computing. AI can also enhance performance by optimizing designs for speed, throughput, and energy efficiency. This accelerates development cycles, reduces time-to-market, and improves fault tolerance and reliability. The program aims to teach participants about AI's role in semiconductor design, its applications, and the significance of Field-Programmable Gate Arrays (FPGAs) in next-generation computing systems. The program will include hands-on workshops, industry perspectives, and practical projects to apply AI-driven design techniques to real-world projects. Participants will learn from industry experts and work in teams to conceptualize, design, and implement AI-driven solutions. The goal is to equip participants with the knowledge and skills to drive innovation in semiconductor design.

Major Course Contents:

Introduction to AI in Semiconductor Design
Fundamentals of Semiconductor Design
AI Techniques for Semiconductor Design
Optimization Strategies for Next-Generation Computing Systems
Advanced Topics in AI-Driven Design
System-Level Design Considerations
Security and Privacy in AI-driven Designs
Industry Applications and Use Cases

Faculty conducting this programme:

The faculty members from NIT Warangal will conduct the programme; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

Registration Link:

For more details about Electronics & ICT Academy, NIT, Warangal, please visit: https://nitw.ac.in/eict/

Registration Fee Particulars:

Faculty and Research Scholars – Rs.1000/-
Industry Participants – Rs.3000/-
Participants need to pay the Registration Fee Online using the following details

Online Transfer Details

Account Name : Electronics & ICT Academy NITW
Account No : 62423775910
IFSC : SBIN0020149
Bank and Branch : State Bank of India, NIT(REC) Warangal

How to apply:

Participants are required to fill the online registration form by clicking on the following link:
https://forms.gle/KjfZkj67mcyom6hc9

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important Dates:

Last date (Application & DD) – 08.08.2024
Selection List by E- mail – 13.08.2024
Duration – 19.08.2024 to 29.08.2024

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years, the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D. programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About KSRCT, Tiruchengode:

K.S. Rangasamy College of Technology (KSRCT), established in 1994, located in a scenic campus area near Tiruchengode, Tamil Nadu. It is a leading institution in Tamil Nadu, offering 14 U.G., 11 P.G., and 12 Ph.D. programs. It is approved by AICTE and affiliated with Anna University, Chennai. KSRCT has achieved Autonomous status by UGC and has a 99th position in NIRF 2017 ranking and 51-100 band in NIRF Innovation Ranking 2023 on Engineering discipline. KSRCT is DST - FIST sponsored, eligible departments with NBA Tier 1 category and NAAC with A++ grade. The institution offers a holistic learning experience with cutting-edge infrastructure, an AICTE-IDEA Lab, an ATAL Community Innovation Centre, and MSME incubation centre. The National Technical Textile Mission, funded by 6.5 Crore rupees. The Institute provides consultancy and R&D activities for several government bodies such as DST, DBT and along with other private industries.

Coordinators

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