Online International Conference

Women Researchers in Electronics & Communication Engineering

WRECE'20

3-5 February 2021

Department of Electronics & Communication Engineering

DR B R Ambedkar National Institute of Technology, Jalandhar

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About the Conference

Though women are underrepresented in engineering, but the number has been growing consistently as more women are opting to pursue studies in this field and still there is a lot required to be done to encourage this trend. We would like to dedicate this conference so as to promote and encourage women engineers and motivate young girls to follow their academic interests to a career in engineering. With a view to inspire women engineers, pioneer and successful women achievers in the domains of VLSI design , wireless sensor networks, communication, image/ signal processing, machine learning, and emerging technologies have been identified from across the globe and invited to present their work and address the participants in this women oriented conference. All the keynote speakers, tutorial presenters, session chairs and the members of conference organizing team are women.

Our Speakers

KEYNOTE

Prof. Nilmini Wickramasinghe — Day 2, 9:30 am IST

Professor of Digital Health and the Deputy Director of the IHIR Institute at Swinburne University of Technology. With over 20 years of experience in health informatics domain, she is well published with more than 400 referred scholarly articles, more than 10 books, numerous book chapters, an encyclopaedia and a well established funded research track as well as a patent .She is also the Editor in chief of two scholarly journals published by Inderscience
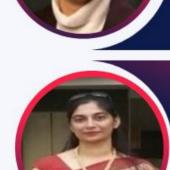
Prof Maryam Shojaei Baghini — Day 3, 9:30 am IST

Professor in Electrical Engineering Department of IIT-Bombay. Her research interests are Sensor, Circuit and System Design, Fabrication and Integration, MEMS/NEMS and Technologies for Sensing, Integrated circuits and system design with emerging devices, Analog/Mixed-signal VLSI design, Specific technologies and performance-optimized analog/mixed-signal/RF circuits & systems for healthcare applications, Energy harvesting and power management circuits & systems.

TUTORIAL

Gayatri Mehta — Day 1, 2:30 pm IST

Associate Professor in the department of Electrical Engineering at the University of North Texas. Her Research interests are in areas of electronic design automation, reconfigurable computing, low-power VLSI design, system-on-a chip design, embedded systems, and portable / wearable computing. Her project, UNTANGLED, an interactive mapping game to uncover human mapping strategies, received the People's Choice Award in the Games & Apps category of the 2012 International Science & Engineering

Dr Prabhjot Kaur — Day 1, 2:30 pm IST

Co-founder and CEO at Esmito Solutions Pvt Ltd Chennai, Tamil Nadu, India. Being proactive in defining Indian Charging Infrastructure working with industry and other stake holders, I want to be contributing towards setting the same for Indian specific needs and with Indian technologies. Very Passionate for Electric Vehicles, translation of R&D to commercialisation, innovating around renewables and EVs; taking steps and paving path towards clean tech, grooming start-ups and Industry-academia Interactions.

Conference Tracks

Track 1: Signal and Image Processing
Chair: Dr Savita Gupta, Professor, UIET, Chd

- Signal Processing Algorithms and Architecture
- Pattern Recognition and Object Tracking
- Biomedical Signal and Image Processing
- Design and Implementation of Signal Processing
- Signal Processing for Communication and Networking
- Soft Computing and its Applications to
- Signal Processing
- Signal processing for Smart Systems
- Human-Computer Interface
- Signal Processing for Cyber Security
- Signal Processing for Big Data
- Internet of things and RFID
- Digital and Multirate Signal Processing
- Audio/Speech and Language Processing
- Machine Learning and Deep Learning for Signal Processing

Trach 2: Communication, Wireless Sensor Networks
Chair: Dr Neena Gupta, Professor, PEC Chandigarh

- Wired, Wireless, Visual, and Acoustic Technologies
- Machine learning for 5G and beyond
- 5G trial implementation and deployment including real-world problems
- Machine learning and deep learning for all types of networks
- Wave Technology
- Massive MIMO
- MIMO-based networking
- Ultra-reliable low latency communications (URLLC)
- Massive Machine Type of Communication
- Cellular/cell-free massive MIMO
- Multiple Radio Access Technologies (M-RATs) interworking
- Next generation radio access networks (RAN)
- Mobile sensing and applications
- Mobility management and models
- Channel modelling and performance analysis

Track 3: VLSI Design
Chair: Dr Rajeevan Chandel, Professor, NIT Hamirpur

- Analog, mixed-signal, and RF designs
- Low-power and thermal-aware design
- Logic and Physical synthesis
- FPGA prototyping
- Reconfigurable computing
- Electronic Design Automation (EDA)
- Hardware/software co-design
- Processor and memory design
- Multicore systems
- Design for Testability
- Embedded system design and IoT
- System-on-Chip (SoC)
- Circuits and systems for signal processing and communication
- Micro-architectural Design
- Challenges for advanced technology nodes
- Nanoelectronics
- Post-CMOS technologies and architectures

Track 4: Assistive/Emerging Technologies
Chair: Dr Rajeevan Chandel, Professor, NIT Hamirpur

- Algorithms and Models
- Feature engineering
- Supervised Learning - Classification, Regression, Unsupervised
- Learning
- Application in Computer Vision
- Natural Language Processing
- Time Series Data
- Heuristic search and Nature inspired search
- Fuzzy logic and applications
- Reinforcement Learning
- Neural Network Theory and Models
- Kernel Methods
- Recurrent Networks
- Deep Neural Networks
- RNN, CNN, RBM Transformer
- Brain Inspired Computing
- Neural models of perception and action
- Data Mining
- Brain-Computer Interaction
- Evolutionary Neural Networks

Author Guidelines

- Authors from India and abroad are invited to submit manuscripts reporting original unpublished research and recent developments in the topics related to the conference.
- All the papers submitted to the conference should be written in English with the maximum page length of six printed pages (10pt font). However, three additional pages are allowed for an extra charge of USD 50 per extra page.
- Submissions must include title, abstract, author affiliation with email address and keywords.
- Simultaneous submissions (papers already submitted to other conferences/journals) are not allowed.
- Submission should strictly follow recommended IEEE conference template, which can be found here .
- Plagiarism Check using Turnitin.
- Papers having more than 20% plagiarism score will be examined and those that are deemed unacceptable will be
- rejected/withdrawn without a formal review.
- All the paper submission will be done on EasyChair conference management software.
- Reviewer assignment will also be made using EasyChair.

Registration Fees

The registration fees for the conference are as follows:

Registration Type	Indian	Foreign
Academicians/Researchers	INR 5000	USD 100
Students	INR 3500	USD 75
Industry	INR 6000	USD 200
Attendees Only	INR 1000	USD 50

Important Dates

Conference dates: **3rd - 5th February, 2021**

Paper Submission deadline :	20 November, 2020
Intimation of acceptance :	10 January, 2021
Submission of Camera-ready Papers :	20 January, 2021
Registration starts :	15 January, 2021
Last date of Registration :	25 January, 2021

How to Register?

National Advisory Committee

Prof. Manju Bala, Director, Khalsa College of Engineering, Amritsar
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Associate Professor, NIT Jalandhar

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For more details: URL of the website