

WREC'21

Proceedings of International Conference on Women Researchers in Electronics and Computing

Editors

- Mamta Khosla
- Indu Saini

Organized by

Department of Electronics and
Communication Engineering
Dr. B. R. Ambedkar National Institute
of Technology, Jalandhar, Punjab, INDIA

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Mamta Khosla
Indu Saini
(Editors)

*Proceedings of International Conference on
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WREC'21 (22nd – 24th April, 2021)

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- Dr Indu Saini, Assistant Professor, Department of Electronics and Communication Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar

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WREC'21

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WREC'21

Foreword

The first International Conference, “Women Researchers in Electronics and Computing” (WREC’2021) was organised in online mode by Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab), INDIA during 22 – 24 April, 2021. This conference was conceptualised with an objective to encourage and motivate women engineers and scientists to excel in science and technology and to be the role models for young girls to follow their footsteps. 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 were 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.

There were two tutorial sessions and two keynote speeches covering the various areas of the conference. Dr Nilmini Wikramasinghe, Prof. Digital Health, & Deputy Director, Iverson Health Innovation Research Institute, Swinburne University of Technology, Australia delivered a keynote speech on Health 4.0, providing insights into how the technologies of IoT can provide superior healthcare for all. Prof Maryam Shojaei Baghini, Department of Electrical Engineering, IIT-Bombay, Powai, Mumbai, INDIA, delivered a keynote talk on Modular Sensor Interfacing and Signal Conditioning. Dr Gayatri Mehta, Associate Professor, Department of Electrical Engineering, University of North Texas, conducted a tutorial on Game-driven Electronic Design Automation on the second day of the conference. Dr Seema Singh, MS (Surgery), PGDM (IIM-A) Digital Health Consultant conducted a tutorial on AI tools to combat antimicrobial resistance (AMR) on the last day. All tutorials and keynote talk were open to general audience. The conference aspired to provide a platform for researchers, engineers, academicians as well as industrial professionals to showcase innovative and interdisciplinary research findings on practical as well as theoretical advancements in Electronics and Computing. There were ten paper presentation sessions in the conference which included papers under four major track viz. Signal/Image processing, Communication and Wireless Sensor Network, Emerging Technologies and VLSI design. In all the conference was highly successful. The 75 papers presented during the sessions maintained a high quality standard and all the sessions were chaired in a professional and efficient way by high profile women researchers in the relevant research areas.

All the papers have been peer reviewed by the competent reviewers of the editorial board before being accepted for publication in these proceedings. Reviewing and initial selection were undertaken electronically. After the rigorous peer-review process, the submitted papers were selected on the basis of originality, significance, and relevance to the conference tracks.

We would like to express our gratitude to the organization staff, members of the program committees and reviewers. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to thank the authors for contributing their research results to the conference. Our sincere thanks to the Dr Shashi Bala Singh, Director NIPER, Hyderabad and Prof. Mini Shaji Thomas, Director, NIT Trichy and Prof. Lalit Kumar Awasthi, Director NIT, Jalandhar for their support and motivation. Special thanks go to our publishing partner AijR Press.

We are grateful to all those who have contributed to the success of WREC’21. We hope that all participants and other interested readers benefit scientifically from the proceedings.

With our warmest regards

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