The Novel Intelligent and Leading Emerging Sciences conference (NILES2020) will be virtually held online from Egypt. It aims to provide a platform for researchers, engineers, academics, and industrial professionals to present their recent research work and to explore future trends in various areas of engineering and technology. NILES 2020 will feature plenary speeches, industrial panel sessions, funding agency panel sessions, poster sessions, and invited/special sessions. Contributions are expected from academia, industry, and government agencies.

The technical committee invites authors to submit papers up to 4 pages (IEEE double-column format with references, figures, tables showing the originality, significance, and applications, and the used techniques). NILES 2020 accepted papers will be submitted for inclusion on the IEEE Xplore. The full papers (without page numbers) should be submitted in PDF format through the online submission system EasyChair.

NILES 2020 has four main tracks, with a list of technical areas in each track. Proposals for special sessions on Coronavirus COVID-19 pandemic challenges and innovative solutions are invited.

Website: http://niles2020.nu.edu.eg/  
Contact Email: niles.conf@nu.edu.eg

**Track 1: Electrical Engineering and Technology**
- FPGA & ASIC Systems and Applications
- VLSI Systems and Applications
- Hardware Security
- System on Chip and Embedded Systems
- IoT, AI and Neural Networks Circuits and Systems
- Memristor And Memristive Systems
- Fractional and Non-Linear Systems
- Analog and Digital Signal Processing
- Design for Testability, Reliability and Verification
- Bi-Imbipe Measurement Techniques
- Smart Agriculture

**Track 2: Communication Engineering and Technology**
- Beyond 5G, Terahertz Communication
- Free-Space Optical Communications
- Integrated and Hybrid Satellite/Terrestrial Networks
- Secure Communication in Optical Fiber Networks
- Artificial Intelligence in Wireless Communications
- Advances in MIMO, 5G, 6G Network
- Communications for Localization, Navigation and Observation
- Blockchain Technology for Intelligent Environments
- Smart Cities and Smart Grids
- Network Operations and Management

**Track 3: Industrial, Mechatronics and Mechanical Engineering**
- Robotics and Automation
- Mechatronics Systems
- Sensor Technologies
- Hydraulic and Pneumatic Systems
- Fluids & Thermal Systems
- Computational Mechanics
- Air Conditioning Applications
- Experimental Fluid Mechanics
- MEMS And Microfluidics Applications
- Dynamics and Mechanical Vibrations
- Material Science and Nanotechnology
- Industrial Systems Manufacturing
- Cooperative Intelligent Systems
- Advances for Process Industries

**Track 4: Computer Science and Engineering, Informatics, and Biomedical Engineering**
- Information Security and Digital Forensics
- Blockchain And Cryptocurrency
- Big Data Technologies
- Computer Networks and Peer-To-Peer Networks
- Software Engineering
- Multimedia, Web and Mobile Applications
- Speech, Audio and Video Processing
- Intelligent Systems and Smart Cities of The Future
- Artificial Intelligence and Deep Learning
- Parallel, Distributed and High-Performance Computing
- Code Generation and Optimization
- Computer Architecture and Quantum Computing
- Computational Micromechanics and Nanomechanics
- Embedded and Real-Time Systems

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**Registration Fees**

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**Important Dates**
- Special Session deadlines: June 2020,19
- Paper submission deadline: July 2020,10
- Author notification: August 2020,28
- Camera-ready version: September 2020,18