



# ACT 2019-Varna, Bulgaria

International Conference "Applied Computer Technologies"

19-21 September 2019  
Technical University of Varna



## CALL FOR PAPERS

The International Conference Applied Computer Technologies (ACT) 2019 is an international event organized by the Technical University of Varna, Republic of Bulgaria and the University of Information Science and Technology "St. Paul the Apostle" - Ohrid, Republic of Macedonia.

On behalf of the organizing committee, we sincerely invite you to participate in the International Conference ACT 2019 from 19<sup>th</sup> to 21<sup>th</sup> September in Varna, Republic of Bulgaria.

ACT 2019 aims to provide a comprehensive global forum for experts and participants from academia to exchange ideas and present results of ongoing research in the most state-of-the-art areas of computer engineering and technology. Different workshops and invited talks by eminent researchers will be held in line with the main conference.

The official language of the conference will be English. The participants can share their knowledge and ideas to map out the directions for the scientific community, in following main areas:

- Applied Mathematics
- Computer Science
- Applied computer science
- Signal and Image Processing
- New Media Art, Science and Technology
- Telecommunications
- Power Systems
- Electronics
- Biomedical Engineering
- Distributed and Parallel Computing
- Information Society and Social Development
- Robotics and mechatronics
- Economy, Management and Sustainable Development.

We are herewith inviting you to submit your original, unpublished and high quality research work to ACT-2019 as short papers 4 pages or full length paper should not exceed 10 pages.

Manuscripts should be provided according to the guidelines given in the following template.

<http://csejournal.cs.tu-varna.bg/>

The submitted articles will be peer-reviewed. Accepted articles will be published in the specialized scientific journal "Computer Science and Technologies" (ISSN 1312-3335).

**Follow this link for Paper Submission**

<https://easychair.org/conferences/?conf=act2019varna>



Venue

Technical University of Varna

Address: 1 Studentska Str., Varna, R. Bulgaria

Web-page: <http://act.uist.edu.mk/>

Email: [act@uist.edu.mk](mailto:act@uist.edu.mk)

## CONFERENCE CHAIRMAN

Ninoslav Marina. Professor, Ph.D., Rector of UIST "St. Paul the Apostle" - Ohrid

Vencislav Valchev. Professor, Ph.D., Rector of TU Varna

## CONFERENCE ORGANIZING COMMITTEE

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Ass. Ljubinka Sandzakoska

Ass. Jovan Karamachoski

Ass. Naum Tuntev

Mr. Pavel Taskov

## IMPORTANT DATES

ABSTRACT SUBMISSION: 24 MAY 2019

ACCEPTANCE NOTIFICATION: 31 MAY 2019

FULL PAPER SUBMISSION DEADLINE: 1 JULY 2019

CONFERENCE DATES: 19 - 21 SEPTEMBER 2019

## AREAS OF INTEREST FOR THE ACT 2019 CONFERENCE INCLUDE, BUT ARE NOT LIMITED TO:

### Applied Mathematics

Applications of Linear Algebra, Geometry (two-dimension, three-dimension, and higher dimension), Number Theory to Computer Science, Distribution Theory, Combinatory Theory Analysis, Optimization Theory, and others.

### Computer Science

Database Systems, Data Management, Big Data, Internet Technology, Internet of Things, Artificial Intelligence, Cognitive Science, Automated Reasoning and Search, Programming Techniques, Advanced Algorithms, Computations, Simulation and Modeling, Engineering Applications, Blockchain, Distributed consensus, XaaS Architectures and Models, Autonomic, Cognitive and Intent-based Networking and Management, Network Artificial Intelligence, Machine Learning and Reasoning, Fog, Edge and Multi-Access Computing, Performance, QoS/QoE Analysis, Big and Fast Data Management, Smart Home Technologies, Cyber security and Data Privacy, Cyber-Physical-Social Systems, and others.

### Signal and Image Processing

Signal Processing, Statistical Signal Processing, Biomedical Signal Processing, Image Processing, Audio Processing, Video Processing, Analysis and Applications of Signals, Data Integration - 3D Computer Vision, Human Computer Interaction, Biomedical Signal Analysis, Computer-Aided Diagnosis in Biomedical Applications, Gesture and Motion Recognition, Computer Tomography, Signal Filters, Interference Detection and Estimation, Telecommunication Signal Processing, Signal Reconstruction, Wavelets/ Cervelet and filter banks, VLSI implementation of signal processing systems, Adaptive Filtering Techniques.

### Telecommunications

Antennas Design - Autonomic computing, Autonomic Communication, Communications in disaster management - Image Processing for Communication Systems, Microwave Communications, Natural Language Processing, Optical Communication Systems, Satellite Communications, Communication Trends, Orthogonal Frequency Division Multiplexing (OFDM), Array Processing, CDN and ICN Control and Architecture. Software Defined Networking, Network Function Virtualization. Measurement, Monitoring and Telemetry, Protocols for Programmable Networks and Software-Defined Infrastructure. Open source and Open standards. 5G Control and Management Architecture, Advanced real-time communications, Network traffic analysis, and others.

### Information Society, Technological and Social Development

Internet and Politics, Digital Society, Electronic Democracy, Electronic Governance, Open Government, Electronic Diplomacy, Electronic Elections, and others.

### New Media Art, Science and Technology

Research topics: Digital Media, Computer Graphic, Computer Animation, Virtual Art, Internet Art, Interactive Art, Video Games, Computer Robotics, 3d Printing, and others.

### Power Systems

Smart Power Systems, Power Electronics and Applications, Power Market Management, Power Systems Optimization, Power Quality Preservation, Power System Reliability, Power Systems Communication, Renewable Energy Systems, Solutions for IoT, Multi-domain, Federated and Hierarchical Orchestration, Electrical components, Machinery, Industry 4.0, and others.

### Electronics

Semiconductors, Reliability of electronic systems, construction of the electronic systems, Digital electronics, Optoelectronics, Analog and Digital System Design, Sensors and Actuators, and others.

### Biomedical Engineering

Computational Biological Systems, Bio-Medical & Healthcare Engineering, Bio transportation, Biosensors and Bioelectronics, Biomedical Device Engineering, Biomedical Imaging, Bio signals, Biomedical Signal Processing and Control, Nanomaterials, Nanoparticles, Quantum dots, 3D Printing and others.

### Distributed and Parallel Computing

High Performance Computing, Ultra-scale parallel architectures, Cloud Computing, Cloud Architectures, Cloud Federation, Grid Computing, Fog Computing, Big Data Applications and Management, Parallel and Distributed Computing for Biological and Medical Applications, and Mobile Computing, and others.

### Robotics and mechatronics

Autonomous robots, Robot design, IoT and Cloud computing in mechatronics, Robotics and Intelligent systems, Control systems, Embedded systems, Autonomous Vehicle Technologies, Robotics Technologies, Sensors and Sensing Network, Human-Centered Robotics, Medical Robotics, Bionics, Mobile Robots, Applied vision systems, Telepresence and VR, Modeling & Simulation, and others.

### Economy, Management and Sustainable Development

Green economy, Intelligent Transportation Systems, Renewable energy and sustainable systems, Logistics & Supply Chain Management, Electronic Commerce & Knowledge Management, Business Modeling, Monitoring & Management, Service Delivery and Operations, Recycling technologies, Renewable sources of energy, Resource management, Sustainable Development and Education, Innovative clean technologies, Air pollution control, Clean energy, Economic and Social aspect of Sustainable Development, Ecosystems Management, Environment Energy Policy, Planning & Management.

Organizing Committee, ACT-2019

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