Authors Slavova (Bulgarian Academy of Sciences, Bulgaria)

Chair of Young Scientists and Tutorials:
Vladimir Jotsov (Bulgarian Academy of Sciences, Bulgaria)

Local Organizing Committee
A. Slavova (Bulgaria) – Chair (slavova@math.bas.bg)
K. Bozhilov, president of John Atanasoff Society of Automatics and Informatics (SAI)
V. Jotsov
P. Koprinkova-Hristova
L. Doskovska
A. Slavova
A. Atanasova
V. Akianov
D. Tarnov
N. Iliev
M. Terejova

Call for Papers
https://www.anna18.cz

Advances in Neural Networks and Applications 2018 (ANNA’18)

Frederic Joliot-Curie International House of Scientists
15-17 September 2018, St. St. Konstantin and Elena Resort, Bulgaria

Neural Networks are dramatically changing in recent years. Besides the general progression in multi-core and many-core designs there is a strong demand for emerging nano-scale technologies with low power dissipation, intelligent, bio-inspired machines, massively-parallel architectures with learning capabilities, and memristive systems.

The workshop on Advances in Neural Networks and Applications 2018 (ANNA’18) will cover advanced aspects of the Neural Networks theory with strong emphasis on different applications in both science and real practice. It is a platform for postgraduate training of Ph.D. students and young scientists where well-known experts of the field will present advanced aspects of neural network theory and applications. Apart from the educational part of the workshop a conference with original authors’ papers will take place. Potential authors are invited to submit their papers on the workshop topics. The workshop on Advances in Neural Networks and Applications 2018 (ANNA’18) is under the methodological supervision of IEEE CAS, Cellular Nanoscale and Array Computing Technical Committee. It is technically co-sponsored by the International Neural Network Society (INNS) and is a regular John Atanasoff Society of Automatics and Informatics (SAI) event.

Prospective authors are invited to submit their papers on topics included but not limited to:

- NEURAL NETWORKS (NNs)
  - Contemporary NN structures and learning algorithms; Self-organizing NNs. Optimization and stability of NNs. Computer aspects of NNs algorithms. Languages, tools and environments for NN-based systems.

- DEEP LEARNING (DL)

- APPLICATIONS OF NNs IN SCIENCE
  - Image processing and pattern recognition; Computational optimization, Control systems, Circuit theory and Electronics; Reasoning systems, Operational research and DSS; Computational Linguistic; Computational neuroscience; Advanced analytics; Data mining and knowledge discovery; Cyber-physical systems; Large-scale applications; Big Data and Data-Science; Other applications of NNs in science.

- REAL PRACTICE APPLICATIONS
  - Process industries; Manufacturing and robotics; Power systems; Transportation systems; Medical; Business; Education; Innovation processes; Security systems; Other applications of NNs in real practice.

The workshop will be held at Freidrichs Joliot-Curie International House of Scientists, 15-17 September 2018, St. St. Konstantin and Elena Resort, Bulgaria. (http://jfbcara.com/en/).

- Proposals for Special Sessions - April 15th, 2018
  - The proposals should be sent by e-mail to Prof. Slavova (slavova@math.bas.bg) or via http://easychair.org/conferences/?conf=anna18

- Special sessions acceptance - May 1st, 2018
  - Notification of papers acceptance - May 15th, 2018
  - Camera-ready submission - May 31st, 2018
  - Early registration - May 31st, 2018
  - Deadline for late registration - June 15th, 2018

- Authors without confirmed registration after this date risk inclusion of their papers in the proceedings.

- Conference dates - September 15-17, 2018

Submitted papers must present previously unpublished research. The manuscript should be of sufficient detail to permit reasonable evaluation by experts in the field. Accepted papers will appear in the conference proceedings published by the VDE Verlag GmbH and will be included in IEEE Xplore digital library. All submissions must be written in English. Initial as well as final papers will be limited to a length of 6 pages and must be prepared according to the typing instructions at www.vde.com/conferences-guidelines. Papers prepared according to these guidelines will be published in the conference proceedings and the proceedings. Any paper included in the conference program, but not being presented at the conference according to the published schedule will not appear in the official proceedings in IEEE Xplore.