

Call for Contributions

Submission:

1. **Inform the Chair:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICAS+2019+Special>

Please select Special Track Preference as **ANNIAS**

Special track

ANNIAS: Application of Neural Networks in Intelligent Autonomous Systems

Chair and Coordinator

Assoc. Prof. PhD. Irina Topalova, FaGEEIM, Technical University Sofia, Bulgaria,
University of Communications and Posts, Sofia, Bulgaria

itopalova@abv.bg

along with

The Fifteenth International Conference on Autonomic and Autonomous Systems

ICAS 2019

June 02, 2019 to June 06, 2019 - Athens, Greece

<https://www.iaria.org/conferences2019/ICAS19.html>

Intelligent Solutions and Artificial Intelligence are already an integral part of modern autonomous systems. There is a growing need to apply different types of neural networks as the primary tool for solving tasks in all autonomous system building blocks. Due to their good adaptive and fast-processing capabilities, when working in real-time hardware systems, the neural networks are a good opportunity to get cost effective and efficient solutions.

Therefore, ANNIAS'19 special track will focus on the research advances related to transfer «learned knowledge» in collective games; deep learning with evolutionary strategies for building autonomous behaviour; predicting and improving the quality of traffic and communication data; application of neural networks in autonomous systems for cybersecurity threat detection; resemblance of the biological model in the autonomous systems by applying the model of artificial neural networks; deploying and improving the performance of the neural network by means of appropriate methods for de-correlation of data inputs, etc.

The purpose of this special track is to gather a group of active researchers in the area of ANNIAS and discuss their most recent research results. The research results can touch upon both advances in theory and applications.

Prospective authors are invited to submit original papers on topics including, but not limited to:

- Application of reinforcement learning techniques in sequential games;
- Evolutionary strategies impact on the performance of reinforcement learning autonomous agents;
- Predicting and improving the quality of traffic and communication data;
- Application of Neural Networks in Autonomous Systems for Cybersecurity Threat Detection;
- Integration of Autonomous Multimodal Biometric Authentication Systems for Cloud Applications;
- Deploying and improving the performance of the neural network by means of appropriate methods for de-correlation of data inputs.

Important Datelines

Inform the Chair: As soon as you decided to contribute

Submission: April 7, 2019

Notification: April 27, 2019

Registration: May 5, 2019

Camera-ready: May 5, 2019

Note: These deadlines are flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=ICAS+2019+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contacts

Chairs: Assoc.Prof PhD Irina Topalova: itopalova@abv.bg

Logistics: steve@iaia.org