

## Call for Contributions

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

2. **Submission URL:**

<https://www.ariasubmit.org/conferences/submit/newcontribution.php?event=ICDT+2021+Special>

Please select Track Preference as **AMAIN 2021**

Special track

## **AMAIN 2021: Applications of Machine Learning / Artificial Intelligence in Modern Networks**

### **Chair and Coordinator**

Stan McClellan, Texas State University, USA

[stan.mcclellan@txstate.edu](mailto:stan.mcclellan@txstate.edu)

along with

ICDT 2021, The Sixteenth International Conference on Digital Telecommunications

<https://www.aria.org/conferences2021/ICDT21.html>

April 18, 2021 to April 22, 2021 - Porto, Portugal

The convergence of Machine Learning and Artificial Intelligence (ML/AI) with modern information networks (such as 5G wireless telecommunications) is enabling a new class of always-connected, multi-dimensional, and previously impossible applications. The data available from distributed sensors, probes, and embedded computing devices makes practical applications from situations that have heretofore been impossible to imagine. From fleets of LED-equipped drones and choreographed "fireworks" to network analysis and optimization, to real-time attitude and position of first responders, applications derived from ubiquitous network connectivity and enabled by ML/AI are becoming incredibly important. Similarly, comparisons of data acquisition & formatting as well as training / testing processes are critical to application successes.

This special track focuses on the technologies, purposes, and architecture of such applications, with a particular interest in multi-disciplinary applications and practical relevance of the problems, enablers, comparisons, and outcomes.

**Note:** *Particularly compelling submissions will be invited to contribute to a forthcoming volume on edge computing and network optimization entitled "De-Mystifying the Edge" which is the third in a series of books by the track chair related to important topics in the "Smart City" phenomenon. Previous volumes include "Smart Cities: Applications, Technologies, Standards, and Driving Factors" (Springer, 2017) and "Smart Cities in Application: Healthcare, Policy, and Innovation" (Springer, 2019).*

### **Topics include, but not limited to:**

- Development, architecture, and outcomes of network-centric applications leveraging ML/AI;
- Challenges in design, verification & validation for network-centric applications enabled by ML/AI;
- Survey of algorithms and their applicability in network-centric use of ML/AI-enabled applications;
- Performance comparisons between cloud-based and edge-based ML/AI techniques
- Technologies, techniques, and best-practices in optimizing applications dependent on network-centric ML/AI;
- Uses of ML/AI in network analysis, software-driven definition, and adaptation;
- Multi-Disciplinary applications and cross-boundary deployment / development of technologies in new areas

### **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](http://www.iaia.org)]
- Presentations: slide only [slide-deck posted on [www.iaia.org](http://www.iaia.org)]
- Demos: two pages [posted on [www.iaia.org](http://www.iaia.org)]

### **Important Datelines**

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: March 4, 2020

Notification: March 20, 2020

Registration: April 1, 2020

Camera ready: April 1, 2020

*Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.*

### **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=ICDT+2021+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>

### **Contact**

Chair : Stan McClellan [stan.mcclellan@txstate.edu](mailto:stan.mcclellan@txstate.edu)

Logistics: [steve@iaia.org](mailto:steve@iaia.org)