The 18th IEEE International Workshop on Cellular Nanoscale Networks and their Applications and The 8th Memristor and Memristive Symposium

# **CNNA 2023**

Find out more at cnna.duth.gr

# Xanthi GR DUTH Sept 28-30

Location

University

**Dates** 

### **Call for Papers**

Computer technology is rapidly changing over the last decades. Besides the general progression in multi-core and many-core designs, there is a strong demand for emerging nano-scale technologies, e.g. memristors, enabling low-power intelligent bio-inspired machines, as well as massively-parallel hardware architectures with learning capabilities. Moreover, sensing and analyzing the visual world requires special detectors and processors. Sensor-processor arrays can solve problems from early image processing up to decision making.

CNNA 2023 will provide an international scientific forum for the presentation of the latest results and exploration of future directions in the context of Cellular Nanoscale Networks and their Applications. In addition, it will host the 8th Memristor and Memristive Symposium, which will be held on September 30th.

#### **Submission Guidelines**

All papers must be original and not simultaneously submitted to another journal or conference. The submitted papers (2-4 pages) must be written in English, using Microsoft Word or LaTex, according to the IEEE guidelines for the two-column IEEE-sponsored conference proceedings. Accepted papers will be included in the proceedings and will be published in the IEEE Xplore digital library. The following topics are covered by the conference:

- Theory of nonlinear spatio-temporal dynamics
- Cellular architectures and algorithms
- Bio-inspired & neuromorphic circuits
- Sensor-Processor-Arrays

- Physical implementations of sensor-processor arrays (VLSI, nanotechnology)
- Learning algorithms & applications
- Applications on FPGAs and GPUs

## **Important Dates**

Deadline for Special Session Proposal Acceptance Notification for Special Session Proposal Deadline for Regular Paper Submission Acceptance Notification for Regular Papers Camera-ready Submission for all Papers

July 12th, 2023 July 31st, 2023 August 10th, 2023 August 20th, 2023 August 27th, 2023

September 7th, 2023

July 7th, 2023

#### **Location and Venue**

The conference will be held in Xanthi, Greece, a city in the north-eastern part of the country with a rich history, natural beauty, and a unique blend of cultures. Xanthi's Ottoman-style architecture is a main attraction, visible throughout the picturesque old town, with its cobblestone streets and colorful houses. It's a destination, that shall surely leave a longlasting positive impression on any visitor.

The conference will be hosted by the Department of Electrical and Computer Engineering at Democritus University of Thrace, a leading academic institution in Greece founded in 1973. Located in Xanthi, the ECE Department is committed to excellence in teaching, research, and innovation, offering students hands-on experience and opportunities to conduct cutting-edge research in various fields, including telecommunications, power systems, microelectronics, and computer engineering.



