SMART-PLANT Technologies for Smart Agriculture in the IoT Era

<u>Technical Program</u>

Sunday 10 December 2023

Venue: Online through Live Streaming (see 1st tab at Webpage)

| TIME | TITLE |
|---------------|--|
| 10:00 – 10:15 | Welcome Note |
| 10:15 – 11:15 | Keynote #1 |
| 10:15 – 11:15 | Title: "Printed Computing: Design Automation and Computing based on Additive Printed Electronics" Presenter: Mehdi B. Tahoori, Chair of Dependable Nano Computing (CDNC), Karlsruhe Institute of Technology |
| 11:15 – 11:30 | Break |
| 11:30 – 13:00 | Session 1: Acceleration at Deep-Edge |
| 11:30 – 12:15 | Title: "Diverse DNN Compression for Edge Al Accelerators" Presenter: Jörg Henkel, Kostas Balaskas, Chair for Embedded Systems, Karlsruhe Institute of Technology |
| 12:15 – 13:00 | Title: "Advancing the customization of edge-based systems for Al applications" Presenter: Iraklis Anagnostopoulos, Southern Illinois University |
| 13:00 – 13:15 | Break |
| 13:15 – 14:45 | Session 2: Network and Resource Virtualization |
| 13:15 – 14:00 | Title: "IoT Protocols Overview and Application to Smart Agriculture" Presenter: Sotiris Goudos, Aristotle University of Thessaloniki |
| 14:00 – 14:45 | Title: "Cloud-Native Orchestration: Synergy Across the Cloud-Edge-IoT Spectrum" Presenter: Anastasios Nanos, Nubificus LTD, United Kingdom |
| 14:45 – 15:00 | Closing session |

Monday 11 December 2023

Venue: Amphitheater III, Aristotle University Research Dissemination Center (KEDEA)

The talks will be also available through **Live Streaming** (see 1st tab at Webpage)

| TIME | TITLE |
|---------------|---|
| 09:30 - 10:15 | Registration |
| 10:15 – 10:30 | Welcome note |
| 10:30 – 11:30 | Keynote #2 |
| 10:30 – 11:30 | Title: "Approximate computing in neural networks" Presenter: Mrazek Vojtech, Brno University of Technology (Czech) |
| 11:30 - 12:00 | Coffee Break |
| 12:00 – 13:30 | Session 4: Smart Agriculture Case Studies |
| 12:30 – 12:50 | Title: "Remote monitoring of beehive based on acoustics signals of honeybees" Presenter: Chrisoula Tananaki, Dimitrios Kanelis, Aristotle University of Thessaloniki |
| 12:50 – 13:10 | Title: "Agroverse: Agricultural robots on demand" Presenter: George Bontzios, Agroverse, Greece |
| 13:10 – 13:30 | Title: "OMEGA: The Agriculture Weeding Robo" Presenter: Petros Katsileros, Terra Robotics, Greece |
| 13:30 - 14:30 | Lunch |
| 14:30 – 16:00 | Session 5: Enabling Technologies for Smart Agriculture |
| 14:30 – 15:15 | Title: "Edge/Cloud Technologies for smart agriculture" Presenter: D. Masouros, National Technical University of Athens |
| 15:15 – 16:00 | Title: "Low-Power Hardware/Software Co-Design for Smart Agriculture" Presenter: Charalampos Kouzinopoulos, Center for Research and Technology Hellas (CERTH) |

| 16:00 – 16:30 | Coffee Break |
|---------------|--|
| 16:30 – 17:15 | Session 6: Programming Framework |
| 16:30 – 17:15 | "Science and Research Computing using the Signaloid Compute Platform" Presenter: Vasileios Tsoutsouras, Signaloid, UK |
| 17:15 – 17:45 | Evaluation Test |
| 17:45 – 18:00 | Presentation of IEEE CASS Society |
| 18:00 – 18:15 | Awards and Closing session |

Sponsors









