



**Tunisian Algerian Conference on Applied
Computing
(TACC 2021)**

**LABEX-TA Workshop on SoS Architectures
(SoSAA 2021)**

18 – 20 December 2021
Tabarka, Jendouba, Tunisia



Program

Saturday, 18 December 2021

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|---------------|---|
| 14h00 – 16h00 | Welcoming participants |
| 16h00 – 16h30 | Coffee break |
| 16h30 – 17h30 | International Projects Presentations:
HEALING, MedSNAIL, and CELAVIE
SOSAA Workshop and LABEX-TA meetings |

Sunday, 19 December 2021

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|---------------|---|
| 08h45 – 09h00 | Opening |
| 09h00 – 10h00 | Invited Speaker
Elyes Lamine, JFC University, France |
| 10h00 – 11h30 | Session 1 |
| 11h30 – 12h00 | Coffee break |
| 12h00 – 13h30 | Session 2 |
| 13h30 – 14h30 | Lunch |
| 14h30 – 16h00 | Session 3 - Online |

Monday, 20 December 2021

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| 09h00 – 10h00 | Invited Speaker
Leila Ben Ayed, University of la Manouba, Tunisia |
| 10h00 – 10h30 | Coffee break |
| 10h30 – 12h00 | Session 4 |
| 12h00 – 12h30 | Cloture & Discussion |
| 12h30 – 14h00 | Lunch |
| 14h00 | Departure |

Session 1: Data Science and Analysis

Session chair: Prof. Hatem Hadj Kacem

Abdelaziz Triki, Bassem Bouaziz, Jitendra Gaikwad and Walid Mahdi.

A deep learning-based approach for segmenting and counting reproductive organs from digitized herbarium specimen images using refined Mask Scoring R-CNN

Siwar Nadhri, Maryam Elamine and Lamia Hadrach Belguith.

Automatic evaluation of existing plagiarism detection tools

Yosr Sahnoun, Mariam Chaabane and Ismael Bouassida Rodriguez.

Social media influence analysis Techniques Systematic Literature Review

Rahma Maalej, Nabil Koufi and Chafik Aloulou.

Parsing Arabic using deep learning technology

Housseem Aloulou, Hamdi Aloulou, Bessam Abdulraak and Ahmed Hadj Kacem.

A persuasive system to improve physical activities of older adults

Session 2: Business Process & Digital Transformation

Session chair: Prof. Ahmed Hadj Kacem

Amal Abid, Saoussen Cheikhrouhou, Slim Kallel and Mohamed Jmaiel.

Temporal Constraints in Smart Contract-Based Process Execution: A Case Study of Organ Transfer by Healthcare Delivery Done

Najla Fattouch, Imen Ben Lahmar and Khoulood Boukadi.

A comprehensive architecture for an IoRT-aware Business Process outsourcing into Fog and Cloud computing

Zakaria Maamar, Saoussen Cheikhrouhou and Said Elnaffar.

A Data-based Guiding Framework for Digital Transformation

Mouna Rekik, Fourati Manel and Boukadi Khoulood.

Business process implementation through SaaS services composition

Mohamed Hedi Fourati, Saoussen Cheikhrouhou, Slim Kallel and Mohamed Jmaiel.

TUNisia-Italy Cross-Border Environment Net platform for emergency response (NETTUNIT): project presentation and early results

Session 3: Online

Session chair: Prof. Faiza Belala

Moez Krichen.

Testing Timed Systems Using Determinization Techniques for One-Clock Timed Automata

Staifi Noureddine and Belguidoum Meriem.

ML-SLA-IoT: a Multi-Level SLA Specification Language for IoT Applications

Ayoub Bouheroum, Djamel Benmerzoug, Sofiane Mounine Hemam and Faiza Belala.

From CA-BRS to BPMN: Formal Approach for Modeling Adaptive Security in Cyber-Physical Systems

Besma Ezeli and Hichem Talbi.

Improvement of Differential Evolution with Multipopulation-based Ensemble of Mutation Strategies

Sahar Smaali and Rachida Boucebsi.

Towards Metamodeling approach For IoT based System of Systems

Session 4: Health care system and Smart cities

Session chair: Prof. Mohamed Jmaiel

Jiddou Youssouf, Rawya Mars, Saoussen Cheikhrouhou and Mariem Turki.

Towards a Blockchain-based approach to fight drugs counterfeit

Abdessamad Saidi, Mohamed Hadj Kacem, Imen Tounsi and Ahmed Hadj Kacem

A Meta-Modeling Approach to Describe Internet of Things Architectures

Imen Abdennadher, Ismael Bouassida Rodriguez and Olfa Awled Al Hadj Abdalah.

A deployment approach for Smart Building applications

Mouna Rhaiem, Mariam Chaabane and Ismael Bouassida Rodriguez.

Position Paper: Considering the air quality service as a system in the smart city System-of-Systems

Partners

