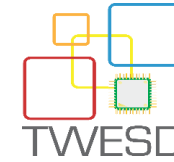


# TWESD 2023 Program



Friday June 16, 2023											
					12:00 -14:00	14:00 - 14:20	14:20- 15:20	15:20-16:00	16:15-17:15	17:15-18:00	Dinner
					Registration	Workshop Opening	Session 1: PhD students	Speaker: Mohamed Kharrat	Break	Session 2: Projects	
							Presentations			Presentations	
Saturday June 17, 2023											
08:30-10:30			Break	10:45-12:45			Lunch break	14:00 - 16:15			Dinner
Session 3: Embedded Artificial Intelligence (1/3)				Session 4: Embedded Artificial Intelligence (2/3)				Session 5: Embedded Artificial Intelligence (3/3)			
Mohamed Dhouioui / Mariem Turki / Olfa Gaddour				Mohamed Dhouioui / Mariem Turki / Olfa Gaddour				Mohamed Dhouioui / Mariem Turki / Olfa Gaddour			
Sunday June 18, 2023											
08:30-09:30		09:30-10:15		Break	10:30-11 :30		11:30-12:30		Release rooms Lunch & Departure		
Session 6 : Artificial Intelligence		Session 7 : Competition			Panel-meeting & Closing Ceremony						
Speaker: Abdelaziz Kallel	Speaker: Anis Koubaa		Best Project IoT and Industry 4.0								

## Friday June 16, 2023

12:00 - 14:00: **Registration**

14:00 - 14:20: **Workshop Opening**

### 14:20 - 15:20: Session 1, PhD Student Presentations

**Session chair: M. Mohamed Abid**

14:20 - 14:35: **Marwa Thabet**, A New family of virtual machine placement algorithms with security constraints

14:35 - 15:50: **Faraqid Kassim**, The optical modelling and fabrication of hybrid perot interferometer based on in-fiber dual micro-cavities for load measurements and band pass filter

14:50 - 15:05: **Sana Chouaibi**, Etude et modélisation d'un microphone MEMS ultrasonore pour la détection précoce de décharges partielles dans les transformateurs de puissance

15:05 - 15:20: **Lassaad Zwai**, Conception d'un système de commande et de monitoring par IoT pour un fauteuil roulant électrique intelligent

**15:20 - 16: 0: Keynote, Mohamed Kharrat**, How to build a lean project

16:00 - 16:15: break

### 16:15 - 17:15: Session 2, Projects Presentations

**Session chair: M. Olfa Gaddour**

16:15 - 16:30: **Mohamed Abid**, Industry 4.0: Embedded AI and Applications

16:30 - 16:45: **Hafedh Trabelsi**, Système de pilotage et supervision autonome

16:45 - 17:00: **Yassine Aydi**, Think big for innovation and excellence

17:00 - 17:15: **Mouna Baklouti**, Blockchain pour la supervision médicale intelligente

**17:15 - 18:00: Keynote, Adem Bouchaala**, Emerging technologies in Industry 4.0

## Saturday June 17, 2023

### 08:30 - 10:30: Session 3, Embedded Artificial Intelligence (1/3)

**Session Chair: M. Wassim Djmal**

**Training: Design and build models**

- Data preparation
- Model building (TF/Keras)
- Model training (custom dataset)
- Model conversion (TF lite)
- Comparative evaluation (Quantization/ Pruning/...etc)

10:30 - 10:45: break

### 10:45 - 12:45: Session 4, Embedded Artificial Intelligence (2/3)

**Training: Transfer learning**

- Data preparation
- Pre-trained model retrieval
- Transfer learning

12:45 - 14:00: Lunch break

### 14:00 - 16:30: Session 5, Embedded Artificial Intelligence (3/3)

**Training: RaspberryPi implementation**

- Setting up a development environment on the Raspberry Pi.
- TF lite model implementation
- Performance evaluation

## Sunday June 18, 2023

### 08:30 - 10:15: Session 6, Artificial Intelligence

**Session chair: M. Omar Cheikhrouhou**

08:30-09:30: **Abdelaziz Kallel**, Remote Sensing: Application on Agriculture Monitoring

09:30-10:15: **Anis Koubaa**, Recent advances of Artificial Intelligence

10:15 - 10:30: break

### 10:30 - 11:30: Session 7, Competition

**Session chair: M. Walid Hassairi**

10:30-11:30: Competition "Best Project IoT and Industry 4.0"

### 11:30 - 12:30: Panel-meeting & Closing-Ceremony

12:45: Release Rooms, Lunch and departure