









# Doctoral Day in Digital Sciences and Industrial Systems

April 13, 2024

# Planning

• 8:30 AM - 9:00 AM: Check-In

9:00 AM - 9:40 AM: Opening Welcome Speeches

Mr. Chokri ABDELMOULA (Director of ENET'Com)

Mr. Abdelwahed MOKNI (President of the University of Sfax)

Mr. Ahmed FAKHFEKH (Director of the Digital Research Center of Sfax)

Mr. Mounir BENAISSA (Director of ISGIS)

Mr. Ahmed Frikha (President of the Doctoral Commission ISGIS)

Mr. Hassene MNIF(President of Doctoral Commission ENET'Com - Project PAQ-DGSE-ENET'Com ( ProMISE) Coordinator

9:40 AM - 10:40 AM: Plenary Conference

"Connected Vehicles, Smart Mobility and Sustainability" presented by Mr. Mohamed MOSBAH, Professor of Computer Science and Vice-President of the Polytechnic Institute of Bordeaux (INP de Bordeaux- France).

10:40 AM - 12:00 PM: Presentation Sessions

Present your thesis in 180 seconds! Two sessions are scheduled simultaneously at ENET'Com. An additional 180 seconds are allocated at the end of each presentation for discussion.

12:00 PM - 12:30 PM: Coffee Break

12:30 PM - 1:30 PM: Poster Sessions

My thesis on a poster! Conccurent sessions are scheduled simultaneously at ENET'Com.

1:30 PM - 2:00 PM: Contest Results and Closing

Award ceremony for winners of each type of contest. Distribution of certificates.





























# Presentation Sessions Session 1 At the Amphi

10:40-10:46: Dhouha GUESMI

"Automatic Detection of Alzheimer's Disease Using Multiple Sources of Information"

10:48-10:54: Fatma BEN SALAH

"Parkinson's Disease Recognition Using Deep Learning Techniques"

10:56-11:02: Ichrak ELBEHI

""Comparison Between Techniques for Locating Epileptogenic Sources"

11:04-11:10: Hadjar ZEBIDI

"Voice Analysis for Early Detection of Neurodegenerative Diseases"

11:12-11:18: Sameh SAMIR

"Context Adaptive Transform Module for VVC"

11:20-11:26: Ekram CHAMSEDDINE

"3D Brain MRI Image Segmentation through Deep Learning and Textural Analysis: Application to Tumor Evolution Modeling"

11:28-11:34: Nawel SLIMANI

"Deep Network Driven Artificial Intelligence Decision Making Based on Fuzzy Logic for Teledetection"

11:36-11:42: Safa JARABA

"Detecting a disease and predicting its type in medical images based on one-to-one Systems"

11:44-11:50: Fadhal HANOUN ABBOUD

"" Lightweight Cryptosystem for IoT Color Image Encryption Using Parallel Processing"

11:52-11:58: Zeineb SADEK

"Smartwatch for the Detection of Epileptic Seizures"





























# Presentation Sessions Session 2 At the Thesis Classroom

#### 10:40-10:46: Wiem BEKRI

"Security and Trust Management Framework for IoT Networks based on SDN and Blockchain"

#### 10:48-10:58: Nozha DHIBI

"Assessment of reputation level in vehicular networks"

#### 10:56-11:02: Safa BATTA

"Contribution to the Improvement of Cooperative Driving Assistance Systems: Approach Based on Graph-Oriented Databases and Artificial Intelligence"

#### 11:04-11:10: Heni GHARIANI

"Contribution to the Optimization and Development of an Intelligent System in Vehicles for Driver Drowsiness Detection"

#### 11:12-11:18: Sana HANANA

"Reinforcement Learning for Autonomous Navigation of a Mobile Robot"

## 11:20-11:26: Nozha JLIDI

"Detection and Tracking of Moving Objects in Videos Acquired by Fixed or Mobile Cameras: An Approach Based on Graph Signal Processing/Graph Neural Networks"

#### 11:28-11:34: Ali HEUSSEIN ALI

"A Machine Learning Approach for Network Intrusion Detection Systems"

## 11:36-11:42: Mariem FOURATI

"A Blockchain-based Solution for Securing Information Systems"





























# Conccurent Poster Sessions

Classroom C07

#### Sonia BOUZIDI

"Enhancing Sustainable Fashion Decision Support with Deep Learning and Image Recognition."

#### Siwar SLIMI

"Development of emotional intelligence models for optimizing vehicle driving."

#### Sirine AMMAR

"Intelligent brain-machine interface approaches for personal services, intelligent mobility and advanced home automation."

#### Rahma MAALEJ

"Automatic Recognition of Epileptic Seizure Onset from Different Modalities of Brain Activity Acquisition."

#### Basma JALLOULI

"Multimodal Approach for Cognitive Assessment of Psycho-motor Function in Elderly."

### Ibtissem BOUSHILA

"Exploration of Brain MRI for the Diagnosis of Juvenile Myoclonic Epilepsy."

# Tayssir BOUSHILA

"Study and Measurement of Cervical Spinal Cord Atrophy on MRI Images: Case of Devic's Neuromyelitis Optica."

#### Aicha NOUISSER

"A multimodal recognition system based on identifying emotions from facial expressions, voice, and even physical activity."

#### **Abderraouf FADHEL**

"Substrate antenna design for energy harvesting in IOT applications."

#### Chawki BARHOUMI

"Emotion Recognition Using Deep Learning with Multimodal Data."

### Hend KAROUI

"Recognition of heart diseases using deep learning."

#### **Nabil BENHAMED**

"Advanced Techniques for Diabetic Retinopathy Disease Detection."

#### **Mahmoud LIMAM**

"Generative Deep Learning Models for Document Image Processing."

#### Nourelhouda HAMMOUDA

"Semantic modeling of livestock animal behaviors based on videos analysis: objects detection and tracking."





























# Conccurent Poster Sessions

Classroom C02

#### Rima BOUGHARIOU

"Study of the Performance of ITS Communication Technologies for Micromobility."

#### Abdelbaki SAADENE

"Cellular network base station load prediction based on Artificial Intelligence (AI) - 5G network case."

## **Amal HMAIDI**

"Efficient Traffic Management for loV environments based MEC and Cloud architecture."

#### Rahma GHORBEL

"Multi modal fusion features for fake news detection on social media."

#### Elhem MHADHBI

"Advanced Phishing Detection and Prevention Strategies using Machine Learning."

# Mohamed Mejdi Said

"U-space Separation management for urban air mobility based on Al."

#### Rabeh SEBTI

"Perception of the machine, From AI to the ego."

# Latifa GASMI

"Resource Allocation scheme based ML for V2X communications in 6G network."

#### Mahdi BELBELY

"Securing communications for driver assistance systems."

# Khadija TURKI

"Study and design of a robotic information systems audit solution based on artificial intelligence."

#### Sabrine BRAHMI

"Contribution to the Design of an Intelligent Assistance System for Alzheimer's Patients, and Detection of Security Attacks in Al Algorithms Used in the Medical Field."

#### **Bouzidi NEJIA**

"Blockchain Technology to Enhance Security in Intelligent Transportation Systems."

#### **Raouf JMAL**

"Detection of trust-related attacks using blockchain."





























# Conccurent Poster Sessions

Classroom C03

## Ibtissem ALGUIRAT

"Optimizing Lean Management of a Sustainable Supply Chain through the Integration of Digital Twins into Industry 5.0."

#### Maroua JABEUR

"Optimization Based on Experimental Designs of the Behavior of Parts Printed by Additive Manufacturing."

## **Amina MASMOUDI**

"Improvement and Optimization of the Multi-Echelon Supply Chain: Application of Learning Models."

# Rihab KHLIFI

"Evaluation of the Potential of Active Filaments: Multi-Objective Optimization of 3D Printing Parameters Based on Additive Agents."

#### Jaber EL MENCHOUL

"An investigation of the contribution of artificial intelligence in the planning and scheduling process under a changing environment."

#### **Dorsaf BOUHAWEL**

"Modeling and Simulation of a Reverse Logistics Chain and Optimization of Vehicle Routes in an Environmental Framework."

#### Abir AMIRA

"The development of a new optimization method for vehicle routing problems taking into account sustainable development..".

## Kais FOURATI

"Additive Manufacturing through Robotic Wire-based Deposition: Optimization of Deposition Parameters and Robot Control..".

#### Ons KHADIJA

"Transport facing the challenges of energy transition and green economic growth: Theoretical and empirical analysis.."

#### **Hanen AYDI**

"Stochastic vehicle routing problem with pickup and delivery."

#### **Oumaima FERSI**

"Integrating Health 4.0 technologies into healthcare management."

















