SUP'COM, University of Carthage

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This presentation is for

Workshop 4 internet of Things

SUP'COM
Ecole Supérieure des Communications de Tunis

جـامعة قـرطاج
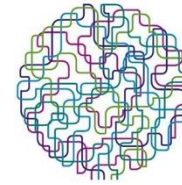Université de Carthage

SUP'COM Summary Profile
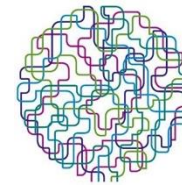
- SUP'COM is an Elite High Institute of Communication that belongs to the University of Carthage (Tunisia) and associated to the Institute Mines Telecom (France)

- Ensures a high level of multidisciplinary engineering studies, PhD programs and R&D in ICT with around 1000 students and 100 faculty members

- 350 researchers active in 7 research labs focusing on novel communication systems and networks including security and data analytics expertise

- 300+ scientific publications per year, the participating to 30+ International research projects and nearly 40 partnership agreements with academia and industrial partners over the world: Europe, Africa, North America and Asia.

- Confirmed experience and outstanding results in research and industrial development through the active involvement in multiple regional and international projects

- EU Project experiences: 2 FP7-ICT, 1 FP6, 1 TEMPUS, several Erasmus projects

SUP'COM Research Activities
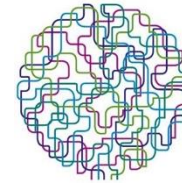
- Around 100 permanent research staff and more than 250 PhD students active in 7 accredited research Labs:
    - GRESCOM (Green & Smart Communication Systems)
    - COSIM (Communication, signals & Images)
    - InnovCom (Innovation of Communicant and Cooperative mobiles)
    - CN&S (Communication Networks & Security)
    - MEDIATRON (Mobile Networks and Multimedia)
    - SN (Digital Security)
- Current research expertise and know-how include:
    - Wireless Communication systems design for cognitive and energy efficient heterogeneous networks
    - Radar signal processing for automated detection, collision avoidance and guidance
    - Image and video processing, analysis and interpretation especially for multi-temporal and multi-sensors applications
    - Security management of electronic services, Networking and internetworking security

IoT-03-2017 Call
IoT Solution using generic and Self-Learning Sensor Fusion for Complex Smart City Application

Objectives:

- to specify, design, implement and deploy an IoT solution for smart city optimized to ensure livability, financial sustainability and environmental responsibility

- to target enhanced scalability and heterogeneity for connecting and managing complex sets of disparate sensors, devices, people and software solutions.

- to develop intelligent and cost-effective sensors based on video analytics, Radar and Lidar technologies for automated sensing and acting

- to define a unified data model, with configurable parameters, for data coming from the different sensor sources to helps to abstract arbitrary sensor units.

- to ensure end-to-end security and privacy for the IoT heterogeneous and dynamic IoT infrastructure and users data

Expected results

- Unified definition of data & control models for multi-sensors fusion unit.

- IoT pilot deployment in three types of cities to deliver a secure and scalable platform to unlock continuous new value for creating more efficient and cost effective municipal services, enhancing public transportation, reducing traffic congestion, and keeping citizens safe and more engaged in the community

Consortium - profile of known partners
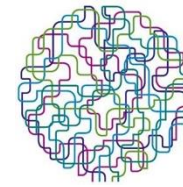
No	Partner Name	Type	Country	Role in the Project
01	SUP'COM, U. Carthage	RTD	Tunisia	Member
02	WEVIOO-EBSYS	SME	Tunisia	Member
03	Hahn-Schickard Institute	RTD	Germany	Member
04	IRSEEM-ESIGELEC	RTD	France	Member
05		IND		
06				
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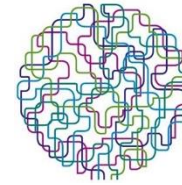
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