Dependable Connectivity as a Service

Dr Keivan Navaie
Reader in Intelligent Cyber-Physical Systems
School of Computing and Communications
k.navaie@lancaster.ac.uk
Network Resources

- Dependability is subject to **timely, reliable and secure** exchange of information
- Smart combination of resources in various network entities improves dependability
- Added values comes from exploiting otherwise unused resources
- DaaS provides an Ecosystem and is an Enabler
Organisation Profile

- Top-ten (7th) in the UK ranking among computing science departments
- A world-class teaching and research hub for computer science and communications systems
- Multi-million research funding from EU and EPSRC
- +100 academic staffs
- +150 PhD and Postdocs

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Dependability of Communications

- Dependability is subject to timely, reliable and secure exchange of information
- Major Enabler for mission-critical systems:
  - Industry 4.0, E-Health, Mass-surveillance, Autonomous cars/robots, Smart cities
Dependable Connectivity (DeC)

- DeC is **collective system capability** to provide task’s required information
- Multi-level cooperation required among
  - Tasks, objects, and RANs as well as on-board processing, etc.
- Aggregation of the available data on-board or at MEC
- DeC is a **task-centric and multi-faceted measure** and can be provided through different combination of resources
Heterogeneity, Dynamism, and Multiple Objectives

- Each entity maximizes its own objective while network resources are limited
- Multi-Objective optimization with multiple degrees of freedom and trade-offs

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Dependable Connectivity as a Service: DaaS

- **WP1:** Architecture Design and Concept development
- **WP2:** System Design
- **WP3:** Algorithm Design and Machine Learning
- **WP4:** Modeling and Analysis
- **WP5:** Implementation and Conformity
- **WP6:** Coordination and Delivery
Partners

Work Packages
• WP1: Architecture Design and Concept development
• WP2: System Design
• WP3: Algorithm Design and Machine Learning
• WP4: Modeling and Analysis
• WP5: Implementation and Conformity
• WP6: Coordination and Delivery

Partners Solicited
• Wireless Network Technology
  • Lancaster University, UK
  • Manchester University, UK
• Software Platforms
  • Paremus, Ltd., UK
• Mobile Edge Networks and Cloud/Fog Computing
• Machine Learning and Algorithms
• Optimization and Modelling
• Project Coordination and Management
• Testbed and Implementation
Contact Info

For more information and for interest to participate please contact:

Dr. Keivan Navaie, CEng, FIET, SFHEA
Reader in Mobile Computing
Email: k.navaie@Lancaster.ac.uk
Phone: +447776362160
Address: SCC, Lancaster University
Lancaster, LA14WA, UK
Join the follow-up Telco

12 September  10-10.30 CET

Meeting number: 954 275 024
Meeting password: BnJqzAvTLink

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