DANIELE SCARPI
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Associate Professor
University of Bologna

STUDIES

M.Sc. with honors in Electronics Engineering, orientation in Computers at University of Bologna in 1997

Ph.D. in Computer Engineering at University of Bologna in 2001

ACADEMIC POSITIONS

Assistant Professor in the scientific sector ING-INF/05 at the University of Bologna since November 2002

Associate Professor in the scientific sector ING-INF/05 at the University of Perugia since November 2005

Full Professor in the scientific sector ING-INF/05 since 2012

PRIMARY RESEARCH TOPICS

Service-oriented architectures for mobile, context-aware, and pervasive applications

Middleware for dynamic and adaptive distributed services in pervasive computing scenarios and integrated wired-wireless systems in general. Application domains:

- Integrated management of networks, systems, and services

- Provisioning of continuous and context-aware services with guarantees/indications of Quality of Service towards mobile users and devices, e.g., by considering predictive and proactibe management of horizontal/vertical handovers

- Wireless sensor networks and smart space services, with special focus on smart buildings and high scalability in wide-scale urban environments

- Framework extensions and services for scalability in IP Multimedia Subsystem (IMS) and in presence infrastructures for standard 3G/4G networks

- Opportunistic and cooperative sharing of resources in highly decentralized and heterogeneous environments (integration/federation of heterogeneous subnetworks, simultaneous exploitation of different network interfaces, sharing incentives, …)

- Opportunistic and completely decentralized urban monitoring via vehicular ad-hoc sensor networking

- Resource replication and dissemination in mobile ad-hoc and dense networks

- Federation of cloud infrastructures and resources, with special focus on Quality of Service and dynamic resource migration

- Efficient and scalable integration, with exploitation of dynamically determined localities, of sensors/actuators and cloud computing for Cyber Physical Systems, with special focus on edge/fog computing techniques

- Online stream processing of big data for cloud-Internet of Things environments