![europass logo]

Personal information

Surname(s) / First name(s)	**Quadri, Christian**
Email(s)	christian.quadri@unimi.it
Nationality(-ies)	Italian
Date of birth	July 01, 1986
Gender	Male

Summary

I am a postdoctoral researcher at the Computer Science Dept. of the University of Milan. My current research interests focus on the 5G communication networks and MEC/FOG-computing and spans the different aspects of the anticipatory networking: (i) Extraction of spatio-temporal behavior of mobile users through the analysis of mobile network datasets (ii) Mining and prediction of network/service resources utilization (iii) Optimal placement of network/service resources in the mobile operator network (core and edge).

My previous research focused on the design and evaluation of routing protocol for opportunistic networks, and the analysis of communication pattern and social interactions of mobile users.

Work experience

Dates	August 2016 – Present
Position	Post Doc
Department	Computer Science Dept.
Organization	Univerisità degli Studi di Milano
Research activities	Study of the spatio-temporal dynamic of individuals and groups of mobile users by analyzing a mobile phone dataset.
	Design, development and test novel 5G ready network and customer services by exploiting Network Function Virtualization (NFV) and Software Defined Networking (SDN) technologies, and Mobile Edge Computing architecture.
	Optimization of resources allocation in MEC/FOG computing scenario.

Dates	November 2014 – October 2015
Position	Post Doc on SmArt project
Department	Computer Science Dept.
Organization	Univerisità degli Studi di Milano
Activities	The idea of SmArt is to build the network of relationships between people and artworks by exploiting the on-site visit to a museum or historical site that, this way, becomes the main lever for bringing both social and economic values in the sector of cultural activities.
	My activities:

- Design and development of the cloud platform of SmArt

- Co-supervisor of the development process

Dates	November 2011 – October 2014
Position	Ph.D. Student in Computer Science (XXVII Cycle)
Department	Computer Science Dept.
Organization	Univerisità degli Studi di Milano

Research activities	My research activities cover different fields of Networking:

- Opportunistic Networks – design and performance analysis of opportunistic routing protocols

- Internet of Things – creation of a social network made by people and things using NFC radio contact

- Cellular Networks – analysis and mining of mobile operator datasets to design new mobile systems and services

Education

Dates	March 2015
Title of qualification	Ph.D. in Computer Science
Subject	Title: "From wide– to short–range communications: using human interactions to design new mobile systems and services" Supervisor: Dario Maggiorini Co-supervisor: Ernesto Damiani
Name and type of organization providing education and training	Univerisità degli Studi di Milano
Dates	October 2011
Title of qualification	Master degree in Computer Science
Name and type of organization providing education and training	Univerisità degli Studi di Milano
Dates	February 2009
Title of qualification	Bachelor degree in Computer Science
Name and type of organization providing education and training	Univerisità degli Studi di Milano

International Schools and other courses

Dates	July 20–27, 2013
Name and type of organization providing education and training	Jacob T. Schwartz International School for Scientific Research
School name	The 40th Lipari School for Scientific Research: Big Data

Academic activities

Dates	November 2011 – present
Thesis co-supervisor	I co-supervised more than 20 bachelor and master thesis in Computer Science.
Dates	2017/2019 and 2018/2019
Occupation	Lecturer
Class	Basic Computer Science course for Medicine
Dates	October 2013 – February 2014 and October 2014 – January 2015
Occupation	Teaching assistant
Class	Computer Science (C programming language laboratory)
Dates	November 2011 – present
Occupation	Reviewer and TCP member

International Conferences	
	– Med-Hoc-Net 2015 – The 14th IFIP Annual Mediterranean Ad Hoc Networking Workshop
	– Med-Hoc-Net 2014 – The 13th IFIP Annual Mediterranean Ad Hoc Networking Workshop
	– CNA 2017 – Complex Networks and their Application 2017
	– CNA 2018 – Complex Networks and their Application 2018
International Journals	
	– Computer Communications
	– Mobile Information System
	– PLOSONE
	– Hindawi- Wireless Communications and Mobile Computing
	– Hindawi- Journal of Computer Networks and Communications
Dates	September 2016 – present
Occupation	Chairing
Session Chair	
	– Poster session chair at Complex Networks and their Applications 2018 (CNA18)
Submission Chair	
	– Complex Networks and their Applications 2017
	– Complex Networks and their Applications 2018

Research projects

Dates	October 2011 – January 2013
Name and type of organization providing the funding	PRIN founded by MIUR (Italian Minister of Education, University and Research)
Project Title	PeopleNET- Socially Aware Routing and Experimental Opportunistic Platform

Personal skills and competences

Mother tongue(s)	**Italian**

Self-assessment
European level[*]

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user

[*]*Common European Framework of Reference (CEF) level*

International Journals Publications

2017	Sabrina Gaito, Christian Quadri, Gian Paolo Rossi, and Matteo Zignani. Urban communications and social interactions through the lens of mobile phone data. *Online Social Networks and Media*, 1(Supplement C):70 – 81, 2017
2015	Matteo Zignani, Christian Quadri, Sabrina Gaito, and GianPaolo Rossi. Calling, texting, and moving: multidimensional interactions of mobile phone users. *Computational Social Networks*, 2(1), 2015
2014	Christian Quadri, Matteo Zignani, Lorenzo Capra, Sabrina Gaito, and Gian Paolo Rossi. Multidimensional human dynamics in mobile phone communications. *PLoS ONE*, 9(7):e103183, 07 2014
2014	Dario Maggiorini, Christian Quadri, and LauraAnna Ripamonti. Opportunistic mobile games using public transportation systems: a deployability study. *Multimedia Systems*, pages 1–18, 2014

International Conference Publications

2018	Christian Quadri, Matteo Zignani, Sabrina Gaito, and Gian Paolo Rossi. On non-routine places in urban human mobility. Accepted *2018 IEEE International Conference on Data Science and Advanced Analytics (DSAA)*
2018	C. Quadri, M. Zignani, S. Gaito, and G. P. Rossi. Feature-rich ego-network circles in mobile phone graphs: Tie multiplexity and the role of alters. In *2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, pages 1280–1285, Aug 2018
2018	C. Quadri, S. Gaito, R. Bruschi, F. Davoli, and G. P. Rossi. A mec approach to improve qoe of video delivery service in urban spaces. In *2018 IEEE International Conference on Smart Computing (SMARTCOMP)*, pages 25–32, June 2018
2018	C. Quadri, M. Zignani, S. Gaito, and G. P. Rossi. Gathering behavior of groups of people in a city. In *2018 IEEE International Conference on Smart Computing (SMARTCOMP)*, pages 333–338, June 2018
2017	Matteo Zignani, Christian Quadri, Michela Del Vicario, Sabrina Gaito, and Gian Paolo Rossi. Temporal communication motifs in mobile cohesive groups. In Chantal Cherifi, Hocine Cherifi, Márton Karsai, and Mirco Musolesi, editors, *Complex Networks & Their Applications VI*, pages 490–501, Cham, 2018. Springer International Publishing
2016	C. Quadri, S. Gaito, and G. P. Rossi. Big-data inspired, proximity-aware 4g/5g service supporting urban social interactions. In *2016 IEEE International Conference on Smart Computing (SMARTCOMP)*, pages 1–8, May 2016
2016	Christian Quadri, Sabrina Gaito, and Gian Paolo Rossi. Proximity-aware offloading of person-to-person communications in lte networks. In *Proceedings of the 13th IEEE Annual Consumer Communications and Networking Conference (CCNC)*. IEEE, 2016
2014	M. Zignani, C. Quadri, S. Bernardinello, S. Gaito, and G.P. Rossi. Calling and texting: Social interactions in a multidimensional telecom graph. In *Signal-Image Technology and Internet-Based Systems (SITIS), 2014 Tenth International Conference on*, pages 408–415, Nov 2014
2014	Sabrina Gaito, Giovanni Manta, Christian Quadri, Gian Paolo Rossi, and Matteo Zignani. Groo-me: Handling the dynamics of our sociality on mobile phone. In *Wireless and Mobile Networking Conference (WMNC), 2014 7th IFIP*, pages 1–4. IEEE, 2014
2013	S. Gaito, D. Maggiorini, C. Quadri, and G.P. Rossi. Selective offload and proactive caching of mobile data in lte-based urban networks. In *Mobile Data Management (MDM), 2013 IEEE 14th International Conference on*, volume 1, pages 271–274, June 2013
2012	Sabrina Gaito, Christian Quadri, Gian Paolo Rossi, and Matteo Zignani. Thinple - the new online sociality is built on top of nfc-based contacts. In *Wireless Days*, pages 1–5, 2012

2012	D. Maggiorini, C. Quadri, and L.A Ripamonti. Scaling online collaborative games to urban level. In *Wireless Days (WD), 2012 IFIP*, pages 1–6, Nov 2012
2012	D. Maggiorini, C. Quadri, and L.A Ripamonti. On the feasibility of opportunistic collaborative mixed reality games in a real urban scenario. In *Computer Communications and Networks (ICCCN), 2012 21st International Conference on*, pages 1–5, July 2012
2012	A Bujari, C.E. Palazzi, D. Maggiorini, C. Quadri, and G.P. Rossi. A solution for mobile dtn in a real urban scenario. In *Wireless Communications and Networking Conference Workshops (WCNCW), 2012 IEEE*, pages 344–349, April 2012
2012	Sabrina Gaito, Dario Maggiorini, Christian Quadri, and Gian Paolo Rossi. On the impact of a road-side infrastructure for a dtn deployed on a public transportation system. In *Networking (2)*, pages 265–276, 2012
2011	Christian Quadri, Dario Maggiorini, Sabrina Gaito, and Gian Paolo Rossi. On the scalability of delay-tolerant routing protocols in urban environment. In *Wireless Days*, pages 1–6, 2011

Book Chapter Publications

2015	Dario Maggiorini, Laura Anna Ripamonti, and Christian Quadri. *Handbook of Digital Games and Entertainment Technologies*, chapter Opportunistic Networking for Games and Entertainment, pages 1–29. Springer Singapore, Singapore, 2015

National Conference Pubblications

2011	Nicole Alicia Rossini, Christian Quadri, and N Alberto Borghese. Clever pacman. In *WIRN*, pages 11–19, 2011

Awards

2017	Best Poster Awards Complex Networks and Their Applications for paper: Matteo Zignani, Christian Quadri, Michela Del Vicario, Sabrina Gaito, and Gian Paolo Rossi. Temporal communication motifs in mobile cohesive groups. In Chantal Cherifi, Hocine Cherifi, Márton Karsai, and Mirco Musolesi, editors, *Complex Networks & Their Applications VI*, pages 490–501, Cham, 2018. Springer International Publishing
2012	Best Paper Awards Workshop NIME 2012 for paper: D. Maggiorini, C. Quadri, and L.A Ripamonti. On the feasibility of opportunistic collaborative mixed reality games in a real urban scenario. In *Computer Communications and Networks (ICCCN), 2012 21st International Conference on*, pages 1–5, July 2012

Computer Science and IT skills

Personal skills

- Big Data mining: ability to process very large datasets

- Back-end architecture design with particular attention to the performance and scalability problems

Databases

- Good knowledge of relational DBMS, in particular PostgreSQL and MySQL

- Good knowledge of NoSQL database MongoDB and Neo4j

Programming languages

- Deep knowledge of Java and Object Oriented programming languages
- Good knowledge of functional programming paradigm
- Good knowledge of Python
- Good knowledge of MATLAB
- Good knowledge of Javascript and html
- Familiar knowledge of SCALA
- Familiar knowledge of C

Operative system

- Good knowledge of Linux operating system
- Good knowledge of shell scripting and utilities

Frameworks and technologies

- Basic knowledge of Apache Spark
- Familiar with Software Defined Networking
- Familiar with Jupyter and Python data-science suite

Cloud platforms

- Familiar with Amazon Web Services technologies

Milano, 25/01/2019