

# GIORGIA V. ROSSI

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## Personal Details

EMAIL: giorgia.vv.rossi@gmail.com

LANGUAGES: Italian (native language), English (fluent), Spanish (intermediate).

## Education

- 2012-17 **PhD, Communications and Signal Processing Group, Imperial College London**  
'Optimised Protocols for Time-Critical Applications and Internetworking in Vehicular Ad-Hoc Networks'
  - Improving the performance of the current vehicle-to-vehicle (V2V) communication standard, to enable applications in road safety and hybrid networking.
  - Research focused on stochastic modelling, MAC protocol optimisation and algorithm design.
- 2009-11 **MSc, Università degli Studi di Roma Tre, Rome, Italy**  
Electronic Engineering for Telecommunication. Final mark: 110/110 awarded with maximum distinction
- 2006-09 **BSc, Università degli Studi di Roma Tre, Rome, Italy**  
Electronic Engineering. Final mark: 110/110
- 2001-06 **Scientific High School J.F. Kennedy, Rome, Italy**  
Diploma. Final mark: 100/100

## Experience

- 2016 **Research Engineer (intern), Toshiba Research Europe Limited (TREL) Bristol, UK**  
Development of algorithm for integration of V2V into current cellular networks (hybrid networks, IoT). Results published.
- 2012 **Visiting Researcher, Imperial College of London**  
Research on mobile ad-hoc networks (part of MSc project), results published.
- 2011 **Exchange Student, Tampere University of Technology, Finland**  
A six-month study abroad within the EC Erasmus programme. Courses attended: 3D media technology, Antennas and Transmission Lines and Waveguides.
- 2009 **Visiting Researcher, Università Sapienza, Rome, Italy**  
Research on electromagnetic metamaterials (part of BSc thesis), results published.

## Professional duties

- 2015 **Co-supervision of MSc and BSc theses**  
Tailored design of theses to fully exploit the students skills and frequent meetings to discuss work progress.
- 2014 **Reviewer, International Journal of Distributed Sensor Networks**  
Evaluation of article submission with consequent feedback provided to improve the quality of the research work evaluated.
- 2013-14 **Elected PhD departmental representative (80+ postgraduate researchers)**  
Duties involved strategic planning of space and facilities, as well as organising fortnightly social gatherings and other larger department events.
- 2013 **Session Chair, IWCMC 2013 Conference (200+ attendees)**  
Manage the conference session and lead Q&A sessions.

## Research Projects

- 2011 **Archeological mapping project**
  - Data collection in the field with Ground Penetrating Radar (georadar) and data processing. Ancient Roman ruins trapped underground were mapped and the results were later published.
- 2011 **Biometric human identification system**
  - Implementation of algorithm for feature extraction from palm vein images and feature matching for secure identification.
- 2010 **Objective estimation of aesthetic quality system**
  - Implementation of linear regression based algorithm for aesthetic feature extraction. Design of human perception test and real data collection for comparison.

## Technical Skills

**Software** Linux, OS X, Windows, MS Office Package, KaleidaGraph.  
**Programming** MATLAB, HTML/CSS,  $\text{\LaTeX}$ .

## Scholarships & Awards

- 2017 **IEEE WCNC Student Travel Grant**  
Awarded to deserving students to present their accepted papers.
- 2015 **The Students' Choice Award, Research Symposium, Imperial College London**  
Poster Competition across the college for the most accessible presentation to a diverse audience.
- 2015 **Third Prize, Research Symposium, Imperial College London**  
Poster Competition across the college for the most accessible presentation to a diverse audience.
- 2012 **PhD Scholarship, Imperial College London**  
U.K. Defence Science and Technology Laboratory (DSTL).
- 2011 **Erasmus Programme Scholarship, Università degli Studi di Roma Tre**  
Selection based on academic merit and level of English knowledge.
- 2010 **Merit Scholarship, Università degli Studi di Roma Tre**  
Awarded for outstanding achievements in BSc.
- 2006-11 **Merit Scholarship, Arca-Enel**  
Awarded for academic merit.

## Interests

**Sports** Gymnastics (8 years-regional amateur champion), bridge (2 years-regional champion), swimming (3 years), kickboxing (3 years), squash (2 years).

- Others**
- Member of Imperial College Finance Society (IMFS) and completed a financial trading course
  - Singing classes (1 year), several demos released on SoundCloud
  - Acting studies (1 year) including minor acting roles in Italian film and media
  - Recreational activity manager at Hotel Resort Torre Normanna

## Publications

- [1] **G.V. Rossi**, and K.K. Leung, "Optimised CSMA/CA protocol for safety messages in Vehicular Ad-Hoc Networks", IEEE ISCC 2017, 3-6 July, Crete, Grece.
- [2] **G.V. Rossi**, Zhong Fan, Woon Hau Chin and K.K. Leung, "Stable clustering for ad-hoc vehicle networking", IEEE WCNC 2017, 19-22 March, San Francisco, US.
- [3] **G.V. Rossi**, and K.K. Leung, "Optimised CSMA protocol to support efficient clustering for vehicular internetworking", IEEE WCNC 2017, 19-22 March, San Francisco, US.
- [4] **G.V. Rossi**, K.K. Leung and A. Gkelias, "Density-based optimal transmission for throughput enhancement in Vehicular Ad-Hoc Networks", IEEE ICC 2015, 8-12 June, London, UK.
- [5] **G.V. Rossi** and K.K. Leung, "Performance tradeoffs by power control in wireless ad-hoc networks", IWCMC 2013, 1-5 July, Cagliari, Italy.
- [6] C. Ferrara, **G. Rossi** et al., "The detectability of archaeological structures beneath the soil using the ground penetrating radar technique", EGU General Assembly 2012, 22-27 April, Vienna, Austria.
- [7] L. Di Palma, **G. Rossi** et al., "Experimental investigations on woodpile EBG metamaterials", META2010, 13-15 December, Rome, Italy.