Kresimir Dabcevic

Curriculum Vitae

Education

2012–Pres.	**PhD in Computational Intelligence**. Research in Cognitive Radio Technologies. Ph.D. thesis title: Intelligent Jamming and Anti-jamming Techniques in Cognitive Radio Domain. University of Genoa, Italy.
2011	**Visiting researcher**. Implementation of 802.15.4. ZigBee PHY Layer Using USRP Software Defined Radios. Mälardalen University, Vasterås, Sweden.
2009–2011	**MSc in Information and Communication Technology** M.Sc. Thesis title: Evaluation of Software Defined Radio Platform with Respect to Implementation of 802.15.4 Zigbee. Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia.
2005–2009	**BSc in Electrical Engineering and Information Technology** B.Sc. Thesis title: Efficiency of Diversity Techniques in Wireless Channels. Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia.

Work experience

International projects

2012–2015	**nSHIELD** - application of security, privacy and dependability in the context of embedded systems (http://www.newshield.eu/). Researcher and work package coordinator.
2012	**ESSOR** - European Secure SOftware defined Radio (http://www.occar.int/36). Researcher.

Academic - teaching activities

2012–Pres.	**Radio Communication Systems** - Teaching assistance.
2013–Pres.	**Supervision of B.Sc. students**.
2009	**Sound and environment** - Teaching assistance.

Industrial

2008–2011	Digital multimedia technician, Nova TV and dnevnik.hr news portal, Zagreb, Croatia. (http://www.dnevnik.hr)

Hardware experience

SDR/CR platforms: SWAVE HandHeld SDR, USRP, Nutaq SFF SDR
Embedded systems: Beagleboard, Beaglebone, OMBRA
Other: Spectrum analyzers, signal generators, etc.

Software experience

Simulation environments: GNU Radio, Matlab, OMNeT++
Development Languages: In order of experience - Matlab, C, C++, Python
Web development: HTML
Operating Sytems: In order of preference - Linux, Windows

Research interests

Implementational aspects of Cognitive Radios and Software Defined Radios, Security
and privacy issues, Embedded systems, Game theory

Professional activities

2014–Pres. IEEE member

2014–Pres. INSTICC member

Referee/Reviewer: *International Journal of Electronics and Communications* (AEU),
Game Theoretic Analysis of Congestion, Safety and Security - Series in Reliability
Engineering (Springer), *Evolution of Cognitive Networks and Self-Adaptive Communication Systems* (IGI Global).

PC Member: Measurable security for Embedded Computing and Communication
Systems (MeSeCCS 2014).

Publications

2015 K. Dabcevic, M.O. Mughal, L. Marcenaro, C.S. Regazzoni. Cognitive Radio as
the Facilitator for Advanced Communications Electronic Warfare Solutions. Under
review, *Springer Journal of Signal Processing Systems.*

2014 K. Dabcevic, A. Betancourt, L. Marcenaro, C.S. Regazzoni. Intelligent Cognitive
Radio Jamming - a Game-theoretical Approach. *EURASIP Journal on Advances in
Signal Processing.*, doi: 10.1186/1687-6180-2014-171

2014 K. Dabcevic, M.O. Mughal, L. Marcenaro, C.S. Regazzoni. Spectrum Intelligence
for Interference Mitigation for Cognitive Radio Terminals. *2014 Wireless Innovation Forum European Conference on Communications Technologies and Software
Defined Radio (WInnComm-Europe 2014).*

2014 M.O. Mughal, K. Dabcevic, G. Dura, L. Marcenaro, C.S. Regazzoni. Experimental
Study of Spectrum Estimation and Reconstruction based on Compressive Sampling
for Cognitive Radios. *2014 Wireless Innovation Forum European Conference on
Communications Technologies and Software Defined Radio (WInnComm-Europe
2014).*

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2014   K. Dabcevic, A. Betancourt, L. Marcenaro, C.S. Regazzoni. A Fictitious Play-based Game-theoretical Approach to Alleviating Jamming Attacks for Cognitive Radios. *2014 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, pp. 8158-8162, doi: 10.1109/ICASSP.2014.6855191.

2014   K. Dabcevic, L. Marcenaro, C.S. Regazzoni. SPD-driven Smart Transmission Layer Based on a Software Defined Radio Test Bed Architecture. *Measurable security for Embedded Computing and Communication Systems (MeSeCCS 2014), within the International Conference on Pervasive and Embedded Computing and Communication Systems (PECCS 2014)*, pp. 219-230, doi: 10.522000004876302190230.

2014   K. Dabcevic, A. Betancourt, M.O. Mughal, L. Marcenaro, C.S. Regazzoni. A Game-theoretical Analysis of Intelligent Cognitive Radio Jamming. *Riunione Annuale 2014 dell'Associazione Gruppo nazionale Telecomunicazioni e Tecnologie dell'Informazione.*

2013   K. Dabcevic, L. Marcenaro, C.S. Regazzoni. Security in Cognitive Radio Networks. In T.D. Lagkas, P. Sarigiannidis, M. Louta and P. Chatzimisios eds., *Evolution of Cognitive Networks and Self-Adaptive Communication Systems, IGI Global.*, pp. 301-335, doi: 10.4018/978-1-4666-4189-1.ch013.

2012   P. Morerio, K. Dabcevic, L. Marcenaro, C.S. Regazzoni. Distributed Cognitive Radio Architecture with Automatic Frequency Switching. *2012 IEEE Workshop on Complexity in Engineering (COMPENG2012)*, pp. 139-143, doi: 10.1109/CompEng.2012.6242968.

Languages

Croatian (native), English (C2), Italian (C1), Portuguese (A2).

Professional References

Dr. Carlo Regazzoni - supervisor during the PhD programme
Department of Electrical, Electronic, Telecommunications Engineering and Naval Architecture, University of Genoa, Italy
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