

Curriculum Vitae — Doina Bucur

CONTACT INFORMATION	INnovation Centre for Advanced Sensors and Sensor Systems (INCAS³) Dr. Nassaulaan 9, 9401 HJ Assen The Netherlands	E-mail: doinabucur@incas3.eu Webpage: http://www.daimi.au.dk/~doina
RESEARCH INTERESTS	Sensor networks: – Safety, analysis and verification of sensor software. – Sensor deployments and distributed behaviour. Technologies for sensing location. Applications of physics in computer science.	
EDUCATION, TRAINING AND EMPLOYMENT	Scientific Researcher , INCAS ³ , The Netherlands	Since Oct 2010
	Post-doctoral researcher , Computing Laboratory, University of Oxford, UK	Dec 2008-Sep 2010
	• Topic: <i>Software Verification for Sensor Nodes</i>	
	PhD , Department of Computer Science, University of Aarhus, Denmark	Sep 2005-Dec 2008
	• Thesis: <i>On Context Awareness in Global Ubiquitous Computing</i>	
	• Advisor: Mogens Nielsen	
	M.Sc. , Computer Science and Engineering Department, Faculty of Automatic Control and Computers, Politehnica University of Bucharest, Romania	2004
	• Thesis: <i>Advanced Network Management in Large Heterogeneous Networks</i>	
	B.Sc., Engineer , Computer Science and Engineering Department, Faculty of Automatic Control and Computers, Politehnica University of Bucharest, Romania	2003
	• Thesis: <i>Implementing a Route Cache on a Linux Router</i>	
	Teaching assistant , Computer Science and Engineering Department, Faculty of Automatic Control and Computers, Politehnica University of Bucharest, Romania	2003-2005
	Research visits and extracurricular instruction	
	• Academic visitor, Computing Laboratory, University of Oxford, UK	
	Topic: <i>Verification for ANSI-C Context-Aware Applications</i>	2008
	• Training as instructor, Cisco Systems, US	
	Topic: <i>Fundamentals of Wireless Networks</i>	2003
GRANT SUPPORT	EPSRC UbiVal : <i>Fundamental Approaches to the Validation of Ubiquitous Computing Applications and Infrastructures</i> , University of Oxford	2008-2010
	Fokus paa Fremtiden : <i>Arkitektur, Applikationer og Graenseflader til Traadloes Telefoni</i> , University of Aarhus	2005-2008
TEACHING	Teaching assistant / demonstrator / course administrator for:	
	Software Verification , University of Oxford	2009
	Computability and Logic , University of Aarhus	2007
	Operating Systems , Politehnica University of Bucharest	2003-2005
	Operating-System Design , Politehnica University of Bucharest	2003-2005
	Formal Languages and Automata , Politehnica University of Bucharest	2005
	Functional Programming , Politehnica University of Bucharest	2005
	Introduction to Algorithms, Algorithm Analysis , Politehnica University of Bucharest	2004
	Local-Area Networks , Politehnica University of Bucharest	2004
	Instructor for:	
	Fundamentals of Wireless Networks , Cisco Academy Training Center, Bucharest	2003-2005
	Cisco Certified Network Associate courses: Networking Basics, Routers and Routing Basics, Switching Basics and Intermediate Routing, WAN Technologies , Cisco Academy Training Center, Bucharest	2001-2005

MAIN
PUBLICATIONS

Software Verification for TinyOS

Doina Bucur and Marta Kwiatkowska,

Proc. ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), ACM, Pages 400-401, 2010.

Bug-Free Sensors: The Automatic Verification of Context-Aware TinyOS Applications

Doina Bucur and Marta Kwiatkowska,

Proc. European Conference on Ambient Intelligence (AmI), Springer Lecture Notes in Computer Science (LNCS), Volume 5859, Pages 101-105, 2009.

Rely-Guarantee Reasoning for Context-Aware Software

Doina Bucur and Marta Kwiatkowska,

Proc. Workshop on Formal Approaches to Ubiquitous Systems (FAUST), 2009.

Towards Software Verification for TinyOS Applications

Doina Bucur and Marta Kwiatkowska,

Proc. Workshop on Formal Approaches to Ubiquitous Systems (FAUST), 2009.

GammaSense: Infrastructureless Positioning using Background Radioactivity

Doina Bucur and Mikkel Baun Kjaergaard,

Proc. European Conference on Smart Sensing and Context (EuroSSC), Springer Lecture Notes in Computer Science (LNCS), Volume 5279, Pages 69-82, 2008.

On Context Awareness in Ubiquitous Computing

Doina Bucur,

PhD Dissertation, University of Aarhus, Denmark, Sep 1, 2008.

Secure Data Flow in a Calculus for Context Awareness

Doina Bucur and Mogens Nielsen,

Concurrency, Graphs and Models, Springer Lecture Notes in Computer Science (LNCS), Volume 5065, Pages 439-456, 2008.

Resource Discovery in Activity-Based Sensor Networks

Doina Bucur and Jakob E. Bardram,

Special Issue on Pervasive Healthcare, Springer Mobile Networks and Applications (MONET), Volume 12, Numbers 2-3, Pages 129-142, 2007.

Resource Discovery in Activity-Based Sensor Networks

Doina Bucur and Jakob E. Bardram,

Proc. International Conference on Pervasive Computing Technologies for Healthcare, Pages 1-10, 2006.

Security Challenges in Local Wireless Networks

Doina Bucur and Octavian Purdila,

Proc. International Romanian Educational and Research Network (RoEduNet) Conference, 2004.

(more details on webpage)

AWARDS,
CERTIFICATIONS

- University scholarship for merit, Politehnica University of Bucharest, Romania (1998-2002, 2004)
- Certifications:
 - *Cisco Certified Network Associate (CCNA)* and
 - *Cisco Certified Academy Instructor (CCAI)* (2003)
- First (1997) and second (1998) national prize at the National Physics Olympiad, Romania

OTHER
INFORMATION

Languages. Fluent in English, Italian and Romanian. Knowledge of Danish, German.

Memberships. IEEE, IEEE Computer Society.

REFEREES

On request.