Tayeb Sofiane Bouhadiba

Contact Address: 7, rue Adrien Ricard, 38000, Grenoble, France

Information E-mail: tayeb.s.bouhadiba@gmail.com

www: http://sardes.inrialpes.fr/~bouhadib

Phone: +33 6 13 87 74 34



Desired Post-doctoral research position

Position Research Interests

Component Models Formal Methods Contracts & Specifications
Embedded Systems Concurrency Models Hardware Virtual Prototyping

EDUCATION Ph.D., Computer Science

Sep. 2010

- Title: 42, a Component-Based Approach to Modeling Embedded Systems

- Field: Formal Methods for Embedded System Design & Verification

- Advisor: Professor Florence Maraninchi

- Institute: Grenoble University, Grenoble, France

M.S., Software & Systems

Jul. 2006

- Topic: Component-Based Models for Embedded Systems

- Field: Academic Approaches to Computer Systems Design

- Advisor: Professor Florence Maraninchi

- Institute: Joseph Fourier University, Grenoble, France

Engineering Degree on Computer Science

Jun. 2004

- Specialization: Networks & Industrial Systems

- Final Project Topic: Intrusion Detection Systems & Honey-pots

- Institute: Mostaganem University, Mostaganem, Algeria

Core Program of Exact Science & Information Technology

Jun. 2000

- Institute: Mostaganem University, Mostaganem, Algeria

ACADEMIC EXPERIENCE

Postdoc at INRIA RHONE-ALPES

Dec. 2010

- Affiliation: INRIA Laboratory

to date

- Tasks: The use of synchronous controller synthesis techniques for the dynamic reconfiguration of component-based software

Ph.D., Research Scholarship at Grenoble Institute of Technology Sept. 2006

- Affiliation: Verimag Laboratory

to Oct. 2010

- Tasks: Design of a new formal approach (42) for modeling heterogeneous embedded systems. Prototype tool implementation. Application to case studies. Connection to other approaches.

Teaching Assistant at ENSIMAG, Grenoble, France

- Automata and Applications

to Jun. 2009

Oct. 2007

- Software Analysis, Design, and Validation
- Object Oriented Programming in Java

M.S., Internship

Jan. 2006

- Affiliation: Verimag Laboratory

to Sep. 2006

- Tasks: Identifying the notion of components for embedded systems

Publications International Conferences

Tayeb Bouhadiba and Florence Maraninchi. Contract-based coordination of hardware components for the development of embedded software. COORDINATION 2009

Tayeb Bouhadiba, Florence Maraninchi, and Giovanni Funchal. Formal and executable contracts for transaction-level modeling in systemC. EMSOFT 2009

Florence Maraninchi and Tayeb Bouhadiba. 42: programmable models of computation for a component-based approach to heterogeneous embedded systems. GPCE 2007

Workshops

T. Bouhadiba, F. Maraninchi, K. Altisen, and M. Moy. Computational Modeling of Non-Functional Properties with the Component Model 42. *MoCC'08*

Florence Maraninchi, Tayeb Bouhadiba. 42: programmable models of computation for a component-based approach to heterogeneous embedded systems. SYNCHRON'07

Industrial Experience

Engineer at CNL, Mostaganem, Algeria

Jun. 2005 to Sep. 2005

- Computer systems management
- Test and evaluation of an under-development software system

Engineer at MCM, Mostaganem, Algeria

Nov. 2004 to Feb. 2005

- Software development
- Personal computer systems installation and repair

Intern at SONATRACH, Arzew, Algeria

Mar. 2004 to May. 2004

- Installation and management of an intrusion detection system

Additional Experience

Member of the University Council for Studies and Student Life at INPG

2009

TECHNICAL SKILLS

- Synchronous programming of reactive systems (Lustre/Scade, Esterel)
- Embedded systems simulation and prototyping tools (SystemC/TLM, Ptolemy, ...)
- Good knowledge of formal methods for software design and verification
- Object-oriented programming

Languages English Good level

French Fluent

Arabic Mother tongue

Personal

- Sport (Horse-riding, Swimming, Football)

Interests - Traveling

- Micro-controller programming