

Maha Elouni

ADDRESS

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EDUCATION

Ph.D. Department of Electrical and Computer Engineering Jan 2016-now
Virginia Polytechnic Institute and State University
Center of Sustainable Mobility (CSM)
Virginia Tech Transportation Institute (VTTI)

General courses: advanced machine learning, applied linear systems, applied linear control, adaptive control systems...

Master of Science Math Department Aug 2013-May 2015
Virginia Polytechnic Institute and State University

General courses: numerical analysis and software, graph theory, matrix theory, numerical optimization, numerical analysis, real analysis, abstract algebra

Master of Science PRISM RSM Network and Multimedia System Sep 2011-Dec 2012
The National School of Computer Science (ENSI), Tunisia

General courses: introduction to embedded systems, communication, new technologies of communication, distributed computing, wireless mobile networks, data analysis, mobile computing and database, formal specification and verification, advanced database, multimedia transport and stream, probability and analysis...

Bachelor of Science The National School of Computer Science Sep 2009-June 2012

General courses: Architecture and microprocessors, data structure, security of application, administration of databasis, design and oriented objects programming, operating systems, software Engineering, complexity, Unix, local area network, computer networks...

First cycle Diploma IPEIEM Sep 2007-July 2009
Major: Mathematics and Physics

Diploma of first cycle university studies from l'Institut Preparatoire aux Etudes d'Ingenieurs El Manar (IPEIEM) and success in the competitive exam of entrance to engineering schools.

TEACHING

Instructor, Virginia Tech

Summer 2015: Mathematics: Basic notions of vector geometry (Math 1224) and calculus (Math 1205)

Spring 2015: Mathematics: Calculus of single variable (Math 1225)

Summer 2014: Mathematics: Basic notions of vector geometry (Math 1224) and calculus (Math 1205)

Graduate Teaching Assistant, Virginia Tech

Fall 2014: Vector geometry (Math 1224)

Spring 2014: Math Emporium (Courses: Math 1015, Math 1016, Math 1114, Math 1526, Math 1536)

Fall 2013: Math Emporium (Courses: Math 1015, Math 1016, Math 1114, Math 1525, Math 1535)

EXPERIENCE

PhD Project Center of Sustainable Mobility July 2012- Dec 2012
Virginia Tech Transportation Institute

Implementing and developing different control methods to control the traffic flow in an urban network. The goal of the research is to reduce traffic congestion and fuel consumption.

Master Project HANA lab July 2012- Dec 2012
The National School of Computer Science

Investigation of the reliability of RSSI-based localization method (Received Signal Strength Indicator) using the experimental platform Arduino.

Senior Project HANA lab Feb 2012- June 2012
The National School of Computer Science

Development of an experimental platform for wireless sensor networks based on Arduino.
Technology/Framework: Arduino, Zigbee, EmonCms.

Engineering Internship Proxym IT July 2011- Aug 2011
Sousse, Tunisia

Design and development of a geolocation application with Android.
Technology/Framework: SDK Android, googleMap, java/Eclipse.

COMPUTER SKILLS

Operating systems: Unix, Linux, Windows, Mac.

Programming languages: C, C++, Java, Arduino, SQL, PHP, Pascal, Maple, MIPS, Assembler, HTML, Shell scripts, Lex and Yacc...

Design: UML, object-oriented design, MVC.

Database: Access, Oracle, MySQL, PostgreSQL, SQLite, Administration Oracle.

Platforms: Matlab, Mathematica, Eclipse, Netbeans, Visual C++, Visual Basic, QT, SDK Android, Arduino.

Web development: HTML, CSS, XML, XSLT, DTD, J2EE, Python, PHP, Javascript.

Networks: Local Networks (Ethernet, Token Ring, Token Bus, X25), UDP, TCP/IP, RIP, OSPF, ARP, ICMP, GSM, WIFI, GPRS, UMTS, WiMax, ZigBee...

LANGUAGES

Fluent: Arabic, English, and French.

Basics of German.