

## **HADJ BOURDOUCEN, PhD, SMIEEE**

PROFESSOR & DIRECTOR CIRC

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### **EDUCATION**

**Ph. D.** Electronics (with Distinction), Ecole Central de Lyon, France, 1987

**MS** Integrated Electronics, Ecole Central de Lyon, France, 1984

**B.Eng.** Electrical & Computer Engineering (First Class), INELEC, University of Boumerdes, Algeria, 1983

### **ACADEMIC RECORDS WITH SQU**

Director, Communication and Information Research Center (CIRC), Sept 2009 - present

Professor of Electrical and Computer Engineering, 05/10-present

Head, Department of Electrical and Computer Engineering, 09/03-08/07

Head, Department of Information Engineering, 09/02-12/02.

### **OTHER RELATED EXPERIENCE: TEACHING, INDUSTRIAL, ETC**

Director, Communication and Information Research Center (CIRC), 2009 to present, Professor of Electrical and Computer Engineering, 2010 to present, Head of Department of Information Engineering at SQU, (09/2002-01/2003). Associate Professor, Electrical & Electronics Engineering INELEC, University of Boumerdes, (1994-1998). Associate Professor, University of Boumerdes, Faculty of Engineering, Department of Electrical & Electronics Engineering, Boumerdes, Algeria 10/94 to 10/97. Assistant Professor, University of Boumerdes, Faculty of Engineering, Department of Electrical & Electronics Engineering, Boumerdes, Algeria 9/90 to 10/94. Assistant Professor, Houari Boumedienne University of Science and Technology, Institute of Electronics, Department of Instrumentation and Communications, Algiers 09/89 to 10/90. Lecturer, Houari Boumedienne University of Science and Technology, Institute of Electronics, Department of Instrumentation and Communications, Algiers 10/87 to 9/89.

### **PUBLICATIONS**

#### *SOME SAMPLE JOURNAL Articles:*

- 1- O. Rehman, M. Ould-Khaoua, H. Bourdoucen, (2015) "Link Quality Estimation in VANETs for Multi-hop Alert Messages Dissemination", International Journal of Communication Networks and Distributed Systems, in press, vol. 15, no 4, 2015.
- 2- Rehman, O., M., Ould-Khaoua, M. Bourdoucen, H., (2015). Performance Evaluation of Broadcast Beacons in VANETs Over Road Intersections and Roundabouts, Global Journal on Technology. Issue 8 (2015) 133-142. Available from: <http://awer-center.org/gjt/>.
- 3- Laxman, K., Myint, M.T.Z., Bourdoucen, H., and Dutta, J., (2014). Enhancement in ion adsorption rate and desalination efficiency in a capacitive deionization cell through improved electric field distribution using electrodes composed of activated carbon cloth coated with zinc oxide nanorods. ACS Appl Mater Interfaces 2014 Jul 26, 6(13):10113-20.
- 4- H. Bourdoucen, F. A. S. Al-Azani, and A. Naamany, (2013) "A Study of Fuzzy Logic-Based Controller for Diff-Serv Bandwidth Broking", Journal of Computing and Information Technology, vol. 21, pp. 1-11, 2013
- 5- A. Al-Lawati and H. Bourdoucen, (2011) "Improvement of RMSE in Optical Fiber Communication Systems Using RBF ANN Post Processing Approach", The Journal of Electrical Engineering, Vol. 11, 1, 2011, 9-12.
- 6- H. Bourdoucen, (2008) "Effect of seasonal temperature fluctuations on performance of 160 Gbps transmission with adjustable chromatic dispersion compensation", Journal of High Speed Networks, vol. 17, no 1, pp 51-57, 2008.
- 7- J. A. Jervase and H Bourdoucen, (2002) "Design of Ultra Fast RCE Photodetectors for Optical Communication Systems", Journal of Scientific Research-Science and Technology, 7, pp. 101-107, 2002.

### CONFERENCE PROCEEDINGS ARTICLES:

- 1- Shaima M. Shakeel, Osama M. Hussain Rehman, Mohamed Ould-Khaoua, Hadj Bourdouden, "Open Source Software Support for Field Experiments of Vehicular Ad Hoc Networks", Free and Open Source Software Conference (FOSSC Oman), 02/2015, Muscat - Oman.
- 2- Maryam Al Lawati, Hadj Bourdouden, Mohamed Ould-Khaoua, Osama M. Rehman; "Performance Evaluation of Broadcast Beacons in VANETs over Road Intersections and Roundabouts", 2nd Global Conference on Computer Science, Software, Networks and Engineering, İzmir, Kuşadası, Turkey, 06-08 November 2014.
- 3- Osama M. Hussain Rehman, Hadj Bourdouden, Mohamed Ould-Khaoua; "Improving Reachability of Multi-Hop Alert Messages Dissemination in VANETs", International Conference on ICT Convergence (ICTC 2014), Oct. 22-24, Busan, Korea. Awarded as best paper.
- 4- Osama M. Hussain Rehman, Hadj Bourdouden, Mohamed Ould-Khaoua; "Relay selection for alert messaging in vanets based on bi-directional stable communication approach ", International Conference on Computing, Communication and Networking Technologies (ICCCNT), 11-13 July 2014, Hefei, China, DOI: 10.1109/ICCCNT.2014.6963052, IEEE, pp 1-7.
- 5- Rehman O. M., Bourdouden H. ; Mohamed Ould-Khaoua, "Single-hop Distributed Relay Nodes Selection for Alert Messages Dissemination in VANETs", IEEE INFOCOM 2013, Turin, Italy.
- 6- Rehman O. M., Bourdouden H. ; Mohamed Ould-Khaoua, "Efficient Alert Messages Dissemination in VANETs using Single Hop Distributed Protocols", WMNC'2013, Dubai, April 23-25, 2013.
- 7- Rehman O. M., Bourdouden H. ; Mohamed Ould-Khaoua, "Impact of NS-2 as FOSS Simulation Tool for Research in Vehicular Ad-hoc Networks", Free & Open Source Software Conference (FOSSC-13), pp. 34 - 38, Muscat - Oman, 2013.
- 8- Tarhuni N., Elmusrati M., Bourdouden H. , Al-Lawati A., "Optical Polarization Code Division Multiple Access", ICECE 2013, Benghazi, Libya, March 26 through 28, 2013.

### **HONORS AND AWARDS**

- 1999 IEEE Senior Member Award, Sultan Qaboos University
- 1995 & 1997, Best Teacher Award, INELEC, ALGERIA.
- 1993 Outstanding Achievement Award by Minister of Higher Education, Algeria.
- 1987 Graduation Ph.D. with honors, Ecole Central de Lyon, France.
- 1983 Top Student Award, INELEC, ALGERIA

### **INSTITUTIONAL AND PROFESSIONAL SERVICES**

#### Professional International Activities:

Chair, Free & Open Source Software Conference (FOSSC-Oman' , 2013 and 2015), General Program and Organization Chair ICCP 2007 and 2009, General Co-chair, WOCN 2004, IEEE Conference on Wireless and Optical Networking, Muscat, 2014. Program Co chair, NetCon 2003, IFIP & IEEE Conference on Security, Mobility and QoS, Muscat, October 2003. General Program chair, ICCCP 2005, on Communications, Computer and Power, Muscat, February 2005. Scientific & Organizing Committee of ICCCP 2001 & ICCCP 1998 On Communications, Computer and Power, Muscat, December 2001 and 1998. Associate Editor (Computer Engineering), the Journal of Engineering Research (TJER). Editorial member and Reviewer for a number of International journals / conferences.

#### Institutional Service Activities:

SQU: Committees (Editor In Chief TJER, Executive, Promotion, College Board, Strategic Planning, Appointment, Accreditation, Student-Staff liaison, Advisor of Engineering Society, College Graduate Studies, Seminars Coordinator, Web , Senior project, Academic advisor, others...).

INELEC: Pedagogy council, Research and Graduate Studies Committee, Student staff liaison committee, Advisory board for Undergraduate studies, Chair: Research Auditing Board for microelectronics.

HB University of Science & Technology: University Equipment committee, Member of faculty board, Advisory board for Undergraduate studies.