

CURRICULUM VITAE

OFFICE ADDRESS

Ridha Hamila
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EDUCATION

Doctor of Technology: Telecommunications, Institute of Communications Engineering, Department of Information Technology, Tampere University of Technology, Finland, June 2002.

Licentiate of Technology (with Honors): Telecommunications, Institute of Communications Engineering, Department of Information Technology, Tampere University of Technology, Finland, January 1999.

Master of Science: Signal Processing & Telecommunications, Signal Processing Laboratory, Department of Information Technology, Tampere University of Technology, Finland, June 1996.

PROFESSIONAL EXPERIENCE

- 09.2009 – Present: **Associate Professor**, Department of Electrical Engineering, College of Engineering, Qatar University, Qatar.
- 08.2003 – 31.1.2014: **Adjunct Professor (Associate Professor)**, Institute of Communications Engineering, Department of Information Technology, Tampere University of Technology, Finland.
- 09.2003 – 08.2009: **Emirates Telecommunications Corporation**, United Arab Emirates, UAE.
- 08.2002 – 07.2003: **System Specialist**, Nokia Networks & Nokia Research Center, Helsinki, Finland.
- 09.1996 – 07.2002: **Researcher and Lecturer**, Institute of Communications Engineering, Department of Information Technology, Tampere University of Technology, Finland.
- 02.1994 – 08.1996: **Research Assistant**, Signal Processing Laboratory, Department of Information Technology, Tampere University of Technology, Finland.
- 02.1999 – 2004: **Toiminimi: Ben Hamila Company**.

PROFESSIONAL ACTIVITIES

- **Postdoctoral Research Award:** "Impact of RF Impairments on 5G Wireless: From Full-Duplex Relaying to Massive MIMO", \$277,200.00 USD, 2015 – 2017.
- **Postdoctoral Research Award:** "Design of Time-Based ADC for Software Defined Radio (SDR) Receivers", \$277,200.00 USD, 2016 - 2017.
- **Graduate Student Research Award:** "DSP for Dirty RF Frontend in Full Duplex 5G System: From Theory to Implementation", \$491,400.00 USD, 2015 – 2018.
- **Qatar National Research Fund:** "Integration of Power Conversion, Energy Management, and Communications Techniques for Electric Vehicles in the Smart Grid", \$800,000 USD, 2016 – 2018.

- **Qatar National Research Fund:** “Exploiting Sparsity for Interference Management in Broadband Networks: Theory, Applications, and Testbeds”, \$1,048,441.50 USD, 2014 – 2017.
- **Qatar National Research Fund:** “Interconnection Networks for Massive Data Centers”, \$946,266.63USD, 2014 – 2017.
- **Qatar National Research Fund:** “Baseband DSP for Dirty RF-Fronts in 4G Systems: From Theory to Implementation”, 808,430.00 USD, 2010 – 2014.
- **Undergraduate Research Experience Program: UREP 14 - 123 - 2 - 042** “Wireless Smart Home Monitoring and Surveillance System”, \$29,980.00 USD, 2013 – 2014.
- **Qatar University Grant:** “Physical Layer Optimization of Unified Broadcasting and Mobile System: Studies and Performance Analysis”, 34.3k USD, 2012 – 2014.
- **Qatar University Grant:** “Knowledge Management Framework for Mobile Services (MKM)”, 28k USD, 2011 – 2013.
- **Qatar University Grant:** “MIMO-OFDM Solutions for Next Generation Wireless Communication Systems: Studies and Performance Analysis”, 41.2k USD, 2010 – 2012.
- **Qatar Telecom (Qtel) Project:** Collaborative research into third generation (3G) networks, technologies and services: “Wireless Channel Characterization for Qatar”, 330k USD, 2010 – 2014.
- **European Union Project:** Advanced Techniques for Mobile Positioning; Galileo Satellite System, MOT Project 600 k€, 2004-2009.
- **System Specialist at Nokia Research Center and Nokia Networks,** Operator WLAN & Location Services, Product Development Office, IP Mobility Networks.
 - Project:** Mobile Positioning for 3G System; Research and Developments, Specifications, 3GPP Standardizations, Assisted-GPS Interface Design for WCDMA System, Implementation and Testing.
 - Project:** Location Measurement Units for 3G System.
- **Leader of the Project:** “Advanced Techniques for Mobile Positioning; WCDMA, GPS”, Funded by **Nokia Mobile Phones**, 1999-2003 Tampere, about 4 person years.
- **Group Leader of the Project:** “Digital and Analog Techniques for Flexible Radio”, 1998-2001, about 40 + 8 person years (TUT&HUT) funded by the National Technology Agency of Finland (**Tekes**) and industry.
- **Project Secretary:** Analog and Digital Signal Processing for Highly Integrated Transceivers; Synchronization Techniques for Digital Receivers, Funded by the **Academy of Finland and Industry**, 1997-2000, about 20 person years.
- **Project Member:** Advanced Transceiver Architectures and Implementations for Wireless Communications, Funded by **Nokia** and the **Academy of Finland**, 2001-2002, about 8 person years.
- **Project Member:** Signal Processing for All-Digital Receivers, funded by the **Academy of Finland**, 1994-1996, about 4 person years.
- **Project member:** Speech Signal Analysis and Recognition, Project Funded by **Nokia Research Center** and the **Academy of Finland**, 1992-1995, about 4 person years.
- **Project member:** Signal & Image Processing, Project Funded by the **Academy of Finland**, 1992-1995, about 4 person years.

HONORS AND AWARDS

- *Doctor of Technology Grant*, Tampere University of Technology, 2002.
- *Tekniikan Edistämissäätiön Award*, for the Doctor of Technology 2000, Total 15.000 FIM.
- *Tekniikan Edistämissäätiön Award*, for the Licentiate thesis 1999, Total 20.000 FIM.

- *Travel grant from the IEEE Communication Society* for the best paper award 1999 at WCNC'99 international conference.
- *Tampere Graduate School in Information Science and Engineering (TISE) Grant*, 1999-2002.
- *Several Tampere Graduate School in Information Science and Engineering (TISE) Travel grants*: EUSIPCO'98 Greece; ISSSE'98 and ICUPC'98 Italy; WCNC'99 USA; PACRIM'99 Canada; WPMC'00 Thailand; ICECS'00 Lebanon; WPMC'01 Denmark; 3Gwireless'01 USA.
- **Habilitation Qualification by the French Ministry of Higher Education and Research**: (2005-61-05261150728).
- **IEEE Student Branch Chair** of Tampere University of Technology.

SUPERVISION AND INSPECTION

- **Post-Doctoral:**
 - **Mohamed Awadin**, Research work on “Impact of RF Impairments on 5G Wireless: From Full-Duplex Relaying to Massive MIMO”, Expected start date May 2015.
 - **Hassan Mostafa**, “Design of Time-Based ADC for Software Defined Radio (SDR) Receivers”, Expected start date June 2015.
 - **Ozgur Ozdemir**, Research work on “Baseband DSP for Dirty RF-Fronts in 4G Systems: From Theory to Implementation”, 2010 – 2014.
 - **Ali Hazmi**, Research work on “MIMO-OFDM Solutions for Next Generation Wireless Communication Systems: Studies and Performance Analysis”, January 2011 - 2012.
- **Doctor of Technology Thesis Supervision:**
 - Imen Sahnoun, Research on “Resource allocation schemes for AF multi-hop in a cognitive radio system,” SUPCOM, 2014 – Present (co-supervision).
 - Lutfi Samara, Research on “Phase Noise, I/Q Imbalance and Timing Jitter Estimation and Mitigation for OFDM-Based Systems”, QU, 2013 - Present.
 - Emna Baccour, Research on “Cloud Computing - Data Center Network”, Dijon, France, 2014 – Present (co-supervision).
 - Zina Chkirbene, Research work on “Cognitive Radio Networks and Cooperative Systems”, Dijon, France, 2014 – Present (co-supervision)..
 - Ala Gwicem, Research work on “OFDM-Based Cooperative Systems”, Qatar University, Dijon, France, 2012 - Present.
 - Muhammed Asif Khan, Research Work on “Traffic Signals Optimization for Emergency Corridors in Qatar”, September 2014 – Present.
 - Seifeddine Bouallegue, Research work on “OFDM-Based Security for Cooperative Systems, Qatar University, 2012 – 2013.
 - Ayman Omri, Contribution to the estimation of broadband channels in MIMO context and multiuser detection, QU, 2010 – 2012 (co-supervision).
 - Hela Shamkhia, Diversity Techniques, Switched Combining, Selection Combining and Performance Analysis, ENIT, Tunisia, 2011 – 2012 (co-supervision).
 - Stanislav Nonchev, Advanced RRM for future multiuser multi-antenna packet radio systems, 2010 – 2011 (co-supervision).
 - Monaem Lakhzouri, Channel estimation and mobile phone positioning in CDMA based wireless communication systems, Tampere University of Technology, Tampere, Finland, 2012 – 2005 (co-supervision).
 - Simona Lohan, Multipath Delay Estimators for Fading Channels with Applications in CDMA Receivers and Mobile Positioning, Tampere University of Technology, Tampere, Finland, 2000 – 2003 (co-supervision).
- **Doctor of Philosophy Thesis: Examiner and Inspection:** Mohamed Chaker Bali, *Inspection: Robust Power Line Communications System for AMI Deployment, SUPCOM, Tunisia, January 2015.*
- **Doctor of Philosophy Thesis: Inspection:** Sassan Iraj, *Novel signal processing techniques for advanced wireless communications*, Tampere University of Technology, Tampere, Finland, 2005.
- **Master of Science Thesis Supervision:**
 - Liu, Wei, GPS application and Simulation in Multipath environment, Tampere University of Technology, Tampere, Finland, 2000.

- Faten Omri, Biometric System on Mobile Cloud Computing, Qatar University, September 2012.
- Ali Riahi, Smart remote Security System, Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, University de Tunis, Tunisia 2013 – 2014.
- **Master of Science Thesis Co-Supervision:**
 - Rasha Abdulrahman Abdullah, Selective Visual Attention in Urban Search and Rescue (USAR) Systems, Khalifa University, Sharjah, UAE, expected by June 2009.
 - Ala Gwicem, Selective Relaying in Cooperative OFDM Systems, Qatar University, June 2012.
 - Houweida Tounsi, Vision-Based Detection and Localization of Vacant Parking Spaces for Mobile Platform, Qatar University, June 2012.
 - Lutfi Samara, Phase Noise Analysis in OFDMA based Systems, Tampere University of Technology, Finland, 2012.
- **Master of Science Thesis Inspection:** Asma'a Mohamed Abid, *An Implementation of Chaotic Encryption in Wireless Voice Transmission*, College of Engineering, Electrical & Computer Engineering Department, University of Sharjah, Sharjah, UAE, 2009.
- **Supervisor and Examiner of Many Final Year Projects (Senior Design Projects).**
- **Supervisor of Many Third and Fourth Year Projects.**

ACADEMIC VISITS & TUTORIALS

- Visiting Professor for one month, Institute of Communications Engineering, Tampere University of Technology, Finland, August 2004, August 2005, August 2006, August 2009.
- Winter Short Course at the Institute for Computing and Communications Technologies (ICCT) of Hammam Sousse, Tunisia, January 2005, January 2006, January 2007, February 2008, and February 2009.
- Organized Summer Course in ICE, Department of Information Technology, TUT, Finland, about "Satellite and Cellular Network Based Positioning Systems," August 2006, where different institutions; Nokia, VTT and experts participated in the event.
- Visiting Researcher for two weeks to Amper Programas (Defense Division, Military Radio, C4 Command and Control Information Systems), Madrid, Spain, July 2008.
- Organizer of Several Industrial Student Visits, among them Industrial Student Trip to Finland, August 2006 (20 UAE students visited Tampere University of Technology, Nokia HQ, Nokia Factory, Nixu, Comptel, Seven companies).
- Visiting researcher for one month, San Diego State University, USA, 1999, Professor Fred Harris, Email: fred.harris@sdsu.edu.
- **Short course for Industry** "On mobile and Satellite Positioning Technologies", provided to the Ministry of Interior, Army, State of UAE, and Etisalat, Sharjah, UAE, November 2008.
- **Tutorial** on "LTE System" provided to the Ministry of Interior State of Qatar, April 2010.
- **Tutorial** on "Satellite and Cellular Geolocation Systems", at The Fourth International Conference on Networked Digital Technologies (NDT 2012), Dubai, UAE, April 2012.
- **Tutorial** on Present and Emerging Satellite and Cellular Geolocation Systems, ICCSPA'2013, American University of Sharjah, UAE, April 2013.
- **Tutorial** on "Mobile and Satellite Localization Systems", at the IEEE GCC Conference, Doha, Qatar, November 2013.

COMMITTEE INVOLVEMENT AND SERVICES

- **Member of the Senate** at Qatar University, 2013.
- Chair of the Academic Research Committee at the Senate, Qatar University, 2012 - 2013.
- Senate Member of the Research Council at Qatar University, 2012 – 2013.
- Expert of the Engineering Committee to the Qatar Court of Appeal
- Member of Recruitment Committee at the EE Department, Qatar University
- Member of the Strategic Committee at the EE Department, Qatar University
- Member of the Senior Design Project Committee at the EE Department at QU
- Member of the Qatar university Communications And Networking lab (Q-CAN), Department of Electrical Engineering, Qatar University
- Member of the Curriculum Committee at the Department of EE, Qatar University
- Member of Lab Resources Equipment Committee, Qatar University
- Involved in ABET accreditation of Qatar University

- Member of the Institute of Communications Engineering (ICE) Research Group, Department of Information Technology, Tampere University of Technology (TUT), Finland
- Nokia QT Mobile Application Training Workshop, at the EE Department, QU, May 2011.
- Organizer of Several Industrial Student Visits (Qtel, Vodafone, Kahrama)
- Short Courses, Consultation and Training for Industry

INTERNATIONAL CONFERENCES COMMITTEE INVOLVEMENT

- **Organizer** of URSI XXVI Convention on Radio Science Conference held at Tampere University of Technology, Tampere, Finland, October 2001.
- **Programme Chair** of Middle East Symposium on Simulation and Modelling, Sharjah, United Arab Emirates, January 2004.
- **Technical Program Sub-Track Chair** of the First International Symposium on Control, Communications and Signal Processing, Hammamet, Tunisia, March 2004.
- **Invited Panelist** in the Second IFIP International Conference on Wireless and Optical Communications Networks, Dubai, United Arab Emirates, March 2005, Panel Title: 3G and Beyond Wireless Communications.
- **Track Chair** of the Innovations in Information Technology Conference, Dubai, 2006.
- **Organizer** of UAE Forum in Telecommunication Research, June 2006.
- **Organizer** of UAE Mobile Phone Application Contest held on May 2006.
- **Track Chair** of the IEEE Wireless Communications & Networking Conference (WCNC), Hong Kong, 2007.
- **Industry Liaison Chair** and **Technical Programme Committee Member** of the 2007 IEEE International Conference on Signal Processing and Communications (ICSPC 2007), Dubai, UAE, November 2007.
- **Program Chair** of the 2008 International Federation of Information Processing (IFIP) Wireless Days Conference, Dubai, UAE, November 2008.
- **Organizer** of UAE Mobile Application Contest held on May 2009.
- **Technical Program Chair**, ISSPA 2010, Kuala Lumpur, Malaysia, May 2010.
- **Publicity Chair** of the Fifth International Conference on Digital Information Management (ICDIM 2010), Lakehead University, Thunder Bay, Canada. July 2010.
- **TPC Member** of the 1st International Workshop on the Performance Enhancements in MIMO-OFDM Systems (PEMOS-2010), Niagara Falls, Canada, October 2010.
- **TPC Member**, International Conference on Wireless and Ubiquitous Systems (ICWUS' 2010), Sousse, Tunisia, October 2010.
- **Publicity Chair** of the International Conference on Information Technology and e-Services, (ICITeS'2011), Sousse, Tunisia, April 2011.
- **TPC Member** of International Conference on Localization and GNSS (ICL-GNSS'2011), Tampere, Finland, June 2011.
- **TPC Member** of International Conference on Localization and GNSS (ICL-GNSS'2011), Tampere, Finland, June 2011.
- **TPC Member** of the 2nd International Workshop on the Performance Enhancements in MIMO-OFDM Systems (PEMOS 2011), Shanghai, China, October 2011.
- **TPC Member** of the International conference on Current Trends in Information Technology (CTIT 2011), Dubai, UAE, October 2011.
- **Track Chair**, The Second International Conference on Communications and Information Technology (ICCIT 2012), Hammamet, Tunisia, June 2012.
- **Track Chair** of IEEE GCC Conference, Power System, Energy, Electronics, Computing, Communications and Industrial Applications Conference, Doha, November 2013.
- **Chair of IEEE Nominating Committee, Qatar Section**, November 2014 - present.
- **Publication chair**, Conference organizing committee member, IEEE Wireless Communications and Networking Conference (WCNC'2016), April 2016, Doha, Qatar.

SUMMARY OF COURSES TAUGHT

- Satellite and Cellular Network Based Positioning Systems (Also for industry)
- Wireless Networks and Applications, 3 credit units
- Wireless Communications, 4 credit units
- Computer Networks, 3 credit units
- Mobile Communications, 4 credit units
- Switching & Data Networks, 4 credit units
- Communications Systems, 3 credit units
- Communications Theory, 3 credit units
- Information Theory, 2.5 credit units
- Digital Transmission, 4 credit units

- Advanced Course in Digital Transmission, 3-5 credit units
- Receiver Architectures and Synchronization in Digital Communications, 3-5 credit units
- Radio Systems, 3 credit units
- Multicarrier Techniques, 2 credit units
- Signal and Systems, 3 credit units
- Fundamental of Electronics, 3 credit units
- Speech Processing, 2 credit units
- Discrete Mathematics, 2 credit units
- Engineering Mathematics, 4 credit units
- Probability and Statistics, 3 credit units

PROFESSIONAL ACTIVITIES

- **Senior Member** of the Institute of Electrical and Electronic Engineers (IEEE), since 2003.
- Member of IEEE Communications Society, since 1994.
- Member of the European Signal Processing Society
- Member of EUROSIS, The European Multidisciplinary Society for Modeling and Simulation Technology.
- Member of Channel Middle-East Magazine, ITP Technology.
- Member of the Finnish Business Council, Finnish Embassy, Abu-Dhabi, UAE.

PAPER REVIEWING FOR JOURNALS AND CONFERENCES

Peer Reviewer of manuscripts submitted to International Journals, amid them:

- IEEE Journal on Selected Areas in Communications
- IEEE Microwave Theory and Techniques (Special issue on UWB)
- IEEE Transactions on Communications
- IEEE Transactions on Signal Processing
- IEEE Signal Processing Letters
- IEEE Communications Letters
- IET Radar, Sonar & Navigation
- IEEE Transactions on Circuits and Systems
- International Journal of Modelling and Simulation
- EURASIP Signal Processing
- SPIE Journals

Reviewer of manuscripts submitted to National and International Conferences, amid them:

FINSIG, FWCW, EUSIPCO, ISCC, ICC, VTC, GLOBECOM, ICECS, MEMS, ACS/IEEE ICCSA, ISCCSP, WCNC, ICU, ISCAS, ISCCSP, ICASSP, ISSPA, TENCON, PIMRC, IIT, etc.

COMPUTER SKILLS

Languages: C, Turbo Pascal, Basic, Visual-Basic, Mathematica, MatLab, Assembler, Java, SPW, COSSAP
Computer Platforms: SUN, HP, PC's
Operating Systems: UNIX, DOS, Linux, Microsoft Windows.
Applications: Emacs, Latex, Frame Maker, MS Office, Open Office, Star Office, Lindo, HTML, Khoros, Xfig, Visio, ImageMagic, PaintShop Pro, Adobe products
Protocols: HTTP, FTP, TCP/IP, HTTPS, SSH

PERSONAL DATA

Name: Ridha Hamila
Date of Birth: 7th of March, 1968
Place of Birth: MSaken
Nationality: Citizen Finland
Marital Status: Married (two kids)

PUBLICATIONS

Journal Papers:

1. L. Samara, R. Hamila, O. Ozdemir, and T. Khattab, "Normalized MSE for OFDMA Signals under Joint Tx/Rx IQ Imbalance," Submitted to IEEE Transactions on Vehicular Technology, October 2015.
2. Z. Chkirbene, S. Foufou, and R. Hamila, "Lacoda: A Scalable Data Center Network," Submitted to Elsevier Journal Computer Networks, October 2015.
3. A. Gouisse, R. Hamila, N. Al-Dhahir, and S. Foufou, "Sparsity-Aware Multiple Relay Selection in Large Multi-hop Decode-and-Forward Relay Networks," Submitted to Springer Journal Mobile Networks and Application, October 2015.

4. Z. Chkrebene, M. Hasna, and **R. Hamila** "Location Privacy Preservation in Secure Crowd-Sourcing based Cooperative Spectrum Sensing," in *EURASIP Journal on Wireless Communications and Networking*, March 2016, DOI: 10.1186/s13638-016-0567-7.
5. M. Awadin, N. Al-Dhahir and **R. Hamila**, "OFDM Full-Duplex DF Relaying Under I/Q Imbalance and Loopback Self-Interference," in *IEEE Transactions on Vehicular Technology*, September 2015, Issue 99, DOI: 10.1109/TVT.2015.2479257.
6. A. El Shafie, N. Al-Dhahir and **R. Hamila**, "A Sparsity-Aware Cooperative Protocol for Cognitive Radio Networks With Energy-Harvesting Primary User," In *IEEE Transactions on Communications*, Year 2015, Vol. 63, Issue: 9, pp. 3118 - 3131, DOI: 10.1109/TCOMM. 2015.2461673.
7. T. Wang, B. Qin, Z. Su, Y. Xia, M. Hamdi, S. Fofou, and **R. Hamila**, "Towards bandwidth guaranteed energy efficient data center networking," in *Springer Journal of Cloud Computing: Advances, Systems and Applications*, May 2015, DOI:10.1186/s13677-015-0035-7.
8. **R. Hamila**, O. Ozdemir, and N. Al-Dhahir, "Beamforming OFDM Performance Under Joint Phase Noise and I/Q Imbalance," in *IEEE Transactions on Vehicular Technology*, May 2015, Issue 99, pp. 1, DOI: 10.1109/TVT.2015.2436698, ISSN 0018-9545.
9. A. Gouisseem, M.O. Hasna, **R. Hamila**, "Novel Selective OFDM-Based Cooperative Techniques For Multihop Systems," in *ELSEVIER Physical Communication*, January 2015, doi:10.1016/j.phycom.2015.01.001.
10. A. Gouisseem, **R. Hamila**, M.O. Hasna, "Outage Performance of Cooperative OFDM-Based Systems Under IQ Imbalance," in *IEEE Transactions on Communications*, Vol. 62, No. 5, May 2014.
11. O. Ozdemir, **R. Hamila** and N. Al-Dhahir, "Exact Average OFDM Subcarrier SINR Analysis Under Joint Transmit-Receive I/Q Imbalance" in *IEEE Transactions on Vehicular Technology*, October 2014, Vol. 63, Issue 8, pp. 4125 – 4130, DOI 10.1109/TVT.2014.2304833.
12. H. Soy, O. Ozdemir, M. Bayrak, **R. Hamila**, N. Al-Dhahir, "Decentralized Multiuser Diversity with Opportunistic Packet Transmission in MIMO Wireless Sensor Networks," in *ELSEVIER, AEÜ – International Journal of Electronics and Communications*, Vol. 76, November 2013, pp. 910 - 925.
13. O. Ozdemir, **R. Hamila** and N. Al-Dhahir, "I/Q Imbalance Compensation in Beamforming MIMO OFDM Transceivers," in *IEEE Transactions on Communications*, Vol.:61, May 2013, pp. 1914 - 1925.
14. A. Omri, **R. Hamila**, M. Hasna, R. Bouallegue, H. Chaieb, "Estimation of highly selective channels for downlink LTE MIMO-OFDM system by a robust neural network," in *the Journal of Ubiquitous Systems and Pervasive Networks*. Vol. 2, No. 1, 2011, pp. 31 – 38.
15. A. Omri, R. Bouallegue, **R. Hamila** and M. Hasna, "Channel estimation for LTE uplink system by perceptron neural network," in *the International Journal of Wireless & Mobile Networks (IJWMN)*, Vol. 2, No. 3, August 2010.
16. Al-Dweik, **R. Hamila**, and M. Renfors, "Blind Estimation of Large Frequency Offset in Wireless OFDM Systems," in *IEEE Transactions on Vehicular Technology*, Vol. 56, March 2007, pp. 965 – 968.
17. **R. Hamila**, M. Lakhzouri, S. Lohan, and M. Renfors, "A Highly Efficient Generalized Teager-Kaiser Based Technique for LOS Estimation in WCDMA Mobile Positioning," in *EURASIP Journal on Applied Signal Processing*, Vol. 5, April 2005, pp. 698 – 708.
18. Simona Lohan, **Ridha Hamila**, Abdelmonaem Lakhzouri, and Markku Renfors, "Highly Efficient Techniques for Mitigating the Effects of Multipath Propagation in DS-CDMA Delay Estimation," in *IEEE Transactions on Wireless Communications*, Vol. 4, January 2005, pp. 149 – 162.
19. Monaem Lakhzouri, Simona Lohan, **Ridha Hamila**, and Markku Renfors, "Extended Kalman Filter for LOS Estimation in WCDMA Mobile Positioning," in *EURASIP Journal on Applied Signal Processing*, Vol. 13, December 2003, pp. 1268-1278.
20. **Ridha Hamila**, Simona Lohan, and Markku Renfors, "Subchip Multipath Delay Estimation for Downlink WCDMA System Based on Teager Operator," in *IEEE Communications Letters*, Vol. 7, No. 1, January 2003, pp. 1-3.
21. **R. Hamila**, J. Vesma, and M. Renfors, "Polynomial-Based Maximum Likelihood Technique for Synchronization in Digital Receivers," *IEEE Trans. on Circuit and Systems II: Analog and Digital Signal Processing*, Vol. 49, No. 8, pp. 567-576, August 2002.
22. **R. Hamila**, J. Astola, F. Alaya Cheikh, M. Gabbouj, and M. Renfors, "Teager Energy and the Ambiguity Function", in *IEEE Transactions on Signal Processing*, Vol. 47, No. 1, pp. 260-262, January 1999.

Patent:

1. Djordje Babic, Ridha Hamila, Jussi Vesma, and Markku Renfors, "Decimation by Irrational Factor Using CIC Filter and Linear Interpolation," Invention Report, filed to Nokia Mobile Phones, May 2000.
2. R. Hamila, O. Ozdemir and N. Al-Dhahir "System and methods for compensation of I/Q imbalance in beamforming OFDM systems", US Patent 20130251057 A1, Published Sept. 2015.

Technical Reports:

1. E.S. Lohan, R. Hamila, A. Lakhzouri, and M. Renfors, "Tutorial on Highly Efficient Techniques for Mitigating the Effects of Multipath Propagation in DS-CDMA Delay Estimation" *Technical Report 1-2003*, Institute of Communications Engineering, Tampere University of Technology, ISBN 952-15-0935-X.
2. R. Hamila, J. Astola, M. Gabbouj and M. Renfors, "Teager Energy and the Ambiguity Function," *Technical Report*, Signal processing Laboratory, Tampere University of Technology, Tampere, Finland 1997.

International Conference Papers:

1. A. O. Al-Abbasi, R. Hamila, W. U. Bajwa, and N. Al-Dhahir, "Design and Analysis Framework for Sparse FIR Channel Shortening," Accepted in the IEEE ICC 2016, May 2016, Kuala Lumpur, Malaysia.
2. A. O. Al-Abbasi, R. Hamila, W. U. Bajwa, and N. Al-Dhahir, "A General Framework for the Design and Analysis of Sparse FIR Linear Equalizers," in the 3rd IEEE Global Conference On Signal & Information Processing (GlobalSIP 2015), December 2015, Orlando, Florida, USA.
3. Z. Chkrebene, S. Fofou, R. Hamila and M. Hamdi, "ScalNet: A Novel Network Architecture for Data Centers," in 2015 IEEE Global Communications Conference: Next Generation Networking Symposium (CG'2015), December 2015, San Diego, CA, USA.

4. E. Baccour, S. Fougou, R. Hamila, and M. Hamdi, "wFlatnet: Introducing Wireless in Flatnet Data Center Network," in 2015 IEEE Global Communications Conference: Next Generation Networking Symposium (CG'2015), December 2015, San Diego, CA, USA.
5. S. Kiranyaz, T. Ince, M. Moncef and R. Hamila, "Convolutional Neural Networks for Patient-Specific ECG Classification," in 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, September 2015.
6. S. Essassi, M. Siala, S. Cherif, R. Hamila, M. Hasna, "Centralized-Decentralized RB Allocation based on Genetic algorithm and coordination over X2 interface in LTE uplink," Twelfth International Symposium on Wireless Communication Systems, (ISWCS'2015), August 2015, Brussels, Belgium.
7. I. Ellouch, F. Abdelkefi, M. Siala and R. Hamila "On Quantized Compressed Sensing with Saturated Measurements via Greedy Pursuit," in EUSIPCO 2015, Venice, Italy, DOI: 10.1109/EUSIPCO.2015.7362675.
8. A. Shafie, N. Al-Dhahir, and R. Hamila "Sparsity-Cognizant Multiple-Access Schemes for Large Wireless Networks With Node Buffers," The 12th IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 2015), October 2015, UT Dallas, USA, DOI: 10.1109/MASS.2015.23.
9. Z. Chkirbene, S. Fougou, R. Hamila and M. Hamdi, "HyperFlatnet: A Novel Network Architecture for Data Centers," in IEEE ICC 2015 - Third International Workshop on Cloud Computing Systems, Networks and Applications, London, UK, June 2015.
10. A. El Shafie, N. Al-Dhahir and R. Hamila, "Exploiting Sparsity of Relay-Assisted Cognitive Radio Networks", in IEEE Wireless Communications and Networking Conference (WCNC'2015), New Orleans, USA, March 2015. DOI: 10.1109/WCNC.2015.7127632.
11. M. Mokhtar, N. Al-Dhahir, and R. Hamila, "I/Q Imbalance and Loop-back Self Interference Effects in Full-Duplex OFDM DF Relays", in the 2015 IEEE Wireless Communications and Networking Conference (WCNC'2015), New Orleans, USA, March 2015, DOI: 10.1109/WCNC.2015.7127449.
12. E. Baccour, S. Fougou, R. Hamila and M. Hamdi, "A survey of wireless data center networks," in IEEE 49th Annual Conference on Information Sciences and Systems (CISS 2015), Washington, USA, March 2015.
13. A. Gouisse, R. Hamila, N. Al-dhahir and S. Fougou, "Sparsity-aware Multiple Relay Selection In Large Decode-and-forward Relay Networks," Qatar Foundation Annual Research Conference, Doha, Qatar, November 2014.
14. M. Mokhtar, N. Al-Dhahir, and R. Hamila, "On I/Q imbalance effects in full-duplex OFDM decode-and-forward relays," in the 10th IEEE Dallas Circuits And Systems Conference (DCAS 2014), Dallas Texas, USA, October 2014.
15. A. Gouisse, M. Hasna, and R. Hamila, "Outage Performance of Incremental Relaying Networks with OFDM Subcarriers Mapping" in IEEE 80th Vehicular Technology Conference, VTC2014-Fall, Vancouver, Canada, September 2014.
16. Seifeddine Bouallegue, Mazen Hasna, and Ridha Hamila, "Improved Relay Selection for Decode-and-Forward Cooperative Wireless Networks under Secrecy Rate Maximization," in IEEE International Wireless Communications and Mobile Computing Conference (IWCMC 2014), Nicosia, Cyprus, August 2014.
17. L. Samara, V. Syrjälä, R. Hamila, and M. Valkama, "Phase Noise Mitigation in OFDMA Uplink," in the 6th International Symposium on Communications, Control, and Signal Processing, ISCCSP 2014, Athena, Greece, May 2014.
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