

Li Li

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1. OBJECTIVE

To obtain a summer internship utilizing my knowledge and skills in Electrical Engineering

2. SUMMARY OF QUALIFICATIONS

- 5+ years of research experience in wireless communications and digital signal processing, specializing in LTE/LTE-Unlicensed, in-band full-duplex, MIMO, OFDM, and LDPC coding
- Extensive programming experience in Matlab/C
- Solid understanding of signal processing, communications theory, data structure, and computer networking
- Excellent team working and interpersonal skills

3. EDUCATION

UNIVERSITY OF DELAWARE Newark, DE

Ph.D. in Electrical & Computer Engineering

Expected: May 2018

HUAZHONG UNIVERSITY OF SCIENCE AND THCHNOLOGY Wuhan, Hubei, China

M.E. in Communication & Information Systems

March 2013

Thesis: "Joint Decoding of LDPC Code and PTS Phase Factors for OFDM Systems"

B.E. in Communication Engineering

July 2010

Thesis: "Design and Implementation of the COFDM Transmitter"

4. PROFESSIONAL EXPERIENCE

University of Delaware, Research/Teaching Assistant

August 2015 – Present

The impact of multiple radio access technologies sharing the same spectrum, funded by Cisco

- Simulate and evaluate the coexistence issues of LAA and 802.11ac from the perspective of throughput and delay
- Design energy detection and efficient channel selection algorithms for LAA

University of Delaware, Research Assistant

August 2013 – July 2015

Overhead-performance tradeoffs in distributed wireless networks, funded by Air Force Research Laboratory

- Analyze the spectral efficiency of cooperative networks, especially for in-band full-duplex relaying
- Analyze the impact of the self-loop interference, cross-talk interference and possible interference from the direct link on the performance of in-band full-duplex relaying
- Propose a delay-diversity scheme to deal with the self-loop and reflected interference in in-band full-duplex acoustics.

Huazhong University of Science and Technology, Research Assistant

September 2010 – March 2013

Research on LDPC codes for PAPR reduction of multi-carrier signals, funded by NSF of China

- Design a joint decoding scheme to simultaneously recover LDPC codewords and PTS phase factors
- Propose a new class of LDPC codes to reduce the PAPR of OFDM signals

Wuhan Guide Infrared Co., Ltd, China, Electronics Engineer (Intern)

January 2010 – June 2010

Transmitter design for Digital Video Broadcasting-Terrestrial (DVB-T) systems

- Design the schematic diagram and PCB of MPEG-2 video and COFDM modulation board;

- Simulate the protocol of DVB-T using MATLAB, and design part of the Verilog codes for RS coding

5. COMPUTER SKILLS

Languages: Labview, Matlab, C, C++, Python, Verilog

Software: Labview, Matlab/Simulink, NS-3, Altium Designer

Hardware: FPGA, MSP430

6. SELECTED PUBLICATIONS

- [1] L. Li, A.J. Song, L.J. Cimini, X.-G. Xia and C.C. Shen, “*Interference cancellation in in-band full-duplex underwater acoustic systems*”, in *MTS/IEEE Oceans 15*.
- [2] L. Li, L. J. Cimini, and X.-G. Xia, “*Impact of direct link on outage of cooperative full-duplex relaying*”, in *IEEE CISS 2015*.
- [3] L. Li, L. J. Cimini, and Y. Xiao, “*Spectral efficiency of cooperative full-duplex relaying with imperfect channel estimation*”, in *IEEE Globecom 2014*.
- [4] D. M. Qu, L. Li, and T. Jiang, “*Invertible subset LDPC code for PAPR reduction in OFDM systems with low complexity*”, *IEEE Transactions on Wireless Communication*, Apr. 2014.
- [5] L. Li and D. M. Qu, “*Joint decoding of LDPC code and phase factors for OFDM systems with PTS PAPR reduction*”, *IEEE Transactions on Vehicular Technology*, Oct. 2013.

7. SELECTED HONORS

- [1] “Professional Development Award”, University of Delaware, 2014.
- [2] “National Scholarship for Graduate students”, China, 2012.
- [3] “Excellent Graduate”, HUST, China, 2012.
- [4] “Excellent Paper Award”, HUST, China, 2011.