

Song-Wen Huang

CONTACT INFORMATION	238 Davis Hall, State University of New York at Buffalo, Buffalo, NY 14260	716-429-6530 songwenh@buffalo.edu www.linkedin.com/in/song-wen-huang-277a1240 www.acsu.buffalo.edu/~songwenh
OBJECTIVE	Wireless Engineer.	
AVAILABLE	Dec. 2017.	
TECHNICAL SKILLS	5G, Wifi, SoC, MIMO, OFDM, CDMA, FPGA, RF IC Design C, C++, Python, MATLAB, Verilog, VHDL, Linux Wireless Communication, Digital Signal Processing (DSP) Algorithm, Spread Spectrum Software Defined Radio Networking (USRP, GNU Radio), Cognitive Radio Networks	
EDUCATION	State University of New York at Buffalo , Buffalo, NY Aug. 2014 - Dec. 2017 Ph.D. in Electrical Engineering Advisor: Prof. Dimitris A. Pados. GPA: 3.92/4.00 National Chiao Tung University , Hsinchu, Taiwan Sep. 2009 - Jul. 2011. M.S. in Electronics Engineering Thesis Advisor: Prof. Feng-Tsun Chien. GPA: 3.51/4.00 National Chiao Tung University , Hsinchu, Taiwan Sep. 2005 - Jun. 2009. B.S. in Electronics Engineering Project Advisor: Prof. Hsie-Chia Chang. GPA: 3.80/4.00	
WORK EXPERIENCES	Research Assistant at State University of New York at Buffalo Aug. 2014 - present. <ul style="list-style-type: none">• Software Defined Radio Transceiver Design with Hardware Implementations• MIMO and Adaptive Beamforming• Joint Channel Estimation and Data Detection for Spread Spectrum Underwater Acoustics• Multicarrier Chirp Division Multiplexing in Underwater Communications Senior Engineer at Macronix International Co., Ltd., Taiwan Feb. 2013 - May 2014. <ul style="list-style-type: none">• DRAM circuit design and customized NVM-based memory design• Maintained Design Rule Checking (DRC) command files for semiconductor processes• Generated Question & Answer (QA) patterns for verifying DRC rules	
HONORS AND AWARDS	2nd Place , Erie Hack Finals, <i>Cleveland Water Alliance</i> 2017. Teaching Assistantship , <i>State University of New York at Buffalo</i> 2014 - 2018. Rank 11th , Undergraduate Score in the Class of EE, <i>National Chiao Tung University</i> 2009.	
PUBLICATIONS	J1 M. I. Torrico, S.-W. Huang and D. A. Pados, "Joint Channel Estimation and Data Detection for Spread-Spectrum Underwater Acoustic Communications," <i>IEEE Journal of Oceanic Engineering</i> (<i>submitted</i>). C1 S.-W. Huang , G. Sklivanitis, D. A. Pados, and S. N. Batalama, "Underwater Acoustic Communications Using Quasi-Orthogonal Chirps," in <i>IEEE Asilomar Conference on Signals, Systems and Computers, California, USA, Oct. 2017. (accepted)</i> . C2 S.-W. Huang , Y.-W. Chan, F.-T. Chien and Y.-C. Chung, "Efficient Resource Allocation in Cooperative Cognitive Radio Networks: A Coalitional Game Approach," in <i>IET International Communication Conference on Wireless Mobile and Computing (CCWMC)</i> , Shanghai, China, Nov. 2011.	