

Yuan Liang

16 Crescent Rd., APT 1621C, East Lansing, MI, USA, 48823

☎ (517) 515 9766

✉ liangy11@msu.edu

Education

- 2015–Present **Ph.D in Electrical and Computer Engineering**, *Michigan State University*, USA, GPA:4.0.
- 2012–2015 **M.S. in Information and Communication Engineering**, *Southeast University*, China, GPA:92/100, rank 1st in the college.
- 2008–2012 **B.S. in Communication Engineering**, *Nanjing University of Posts and telecommunications*, China, GPA:85/100.

Research Experience

- 2013–2015 **Graduate Research Assistant**.
 - **The Design of DRM Based Digital Broadcasting Software for Multiplatforms**, Multimedia Lab, Southeast University, in collaboration with Suzhou Easternwonder Information Technology Company
 - Designed and developed Low-Density Parity-Check coding module in OFDM-based communication system, combined with Multilevel Coding
 - Designed audio interfaces on Android and iOS platforms by C++ and GUI on mobile platforms by Qt
 - Tested the performance of the software over different channels
 - **The Design and Analysis of LDPC Codes with EBPSK and MPPSK Modulations**, Multimedia Lab, Southeast University
 - Designed the calculation of likelihood ratio in LDPC belief propagation decoding from non-coherent demodulation of EBPSK and MPPSK signals
 - Simulated and compared the performance of LDPC codes with different demodulation schemes of EBPSK and MPPSK signals

Publications

- [1] Y. Liang, S. Zhang, P. Gu, and L. Wu, "Efficient construction and encoding of qc-ldpc codes by cyclic lifting of protographs," *Journal of Southeast University (English Edition)*, vol. 31, no. 1, pp. 25 – 30, 2015. [Online]. Available: <http://dx.doi.org/10.3969/j.issn.1003-7985.2015.01.005>
- [2] —, "On the design of mlc-ldpc-ofdm in drm mf and hf channels," in *Wireless Communications and Signal Processing (WCSP), 2014 Sixth International Conference on*, Oct 2014.

Skills

- **Programming Languages:** Proficient in: C, C++, Matlab, Java, TeX
- **Software Skills:** Matlab (Advanced), Visual Studio (Advanced), Qt (Advanced).

- **Languages:** English, Chinese(Simplified).

Awards & Honors

- 2015 **Engineering Distinguished Fellowship of ECE department**, *Michigan State University*.
- 2014 **National Scholarship of China(Highest Honor)**.