Liang Li

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Summary

Apply for internship in RF design / Signal integrity related area

Education

Missouri University of Science and Technology Aug.2013—Present

M.S. Electrical Engineering, GPA 4.0/4.0 Advisor: Dr. Jun Fan

Huazhong University of Science and Technology Sep.2009—May.2013

B.S. Electrical Engineering, GPA 3.7/4.0, Ranking 2/20 (Honor Class)

Related Courses

Advanced RF Measurement/Design	Antenna Analysis and Design
Interference Control	Analog/Digital/RF Circuit
Advanced Electromagnetics	Computational Electromagnetics
Signal Integrity	VLSI Design

Research Experience

1. **Near-field to Far-field Transformation (Huawei)** Sep.2013-Nov.2014
   - Estimating radiation from noisy IC in far-field by near-field scanning
   - Studying coupling from noisy IC to peripheral RF device in near-field
   - Developing a GUI tool for NF-FF transformation
2. **RF Interference Analysis for Cellphone System (Samsung)** Sep.2013-Present
   - Evaluating RFI issue in mixed RF/digital circuits by reciprocity theorem
   - Predicting the coupled noise power from radiation source (IC etc.) to neighboring sensitive RF antenna by near-field scanning technique
   - Simulating the shielding can effect on RFI estimation
3. **Emission Test for IC (Amkor)** Nov.2014-Jan.2015
   - Measuring far-field and near-field radiation pattern originates from a series of weakly radiating IC with different shielding processes
   - Analyzing shielding performance of IC with different shielding processes
4. **RF Interference Estimation for IC radiation (Microsoft Mobile)** Jan.2015-Present
   - Creating model for radiation source in simulation tool

- Simulating noise/signal power on RF antenna and compare with measured power
- Integrating the RFI estimation method into simulation tool by macro programming

5. **Other Projects (During Undergraduate)**
   - Building DPSK based acoustic telecommunication system by two laptops
   - Simulating process/page/disk scheduling algorithm in C++
   - Designing Passive-Keyless-Entry by CC2530 wireless MCU

Related Skills

- **RF Equipment**: VNA, Spectrum Analyzer, TDR, Oscilloscope, etc.
- **Software**: HFSS, CST MWS, EMCstudio, ADS, Cadence Allegro, Cadence Virtuoso, HSPICE
- **Programming**: Proficient in Python, Matlab, C/C++; experience with VB, Verilog HDL

Selected Honors and Awards*

Full fellowship as research assistant (EMC laboratory, U.S.)

National Computer Rank Examination Certificate, Grade 2 (C Language) and Grade 4 (Network Engineer)

National Qualification Certificate of Computer and Software Technology Proficiency (Network Engineer)

Excellent Graduate in Year 2013

Outstanding Academic Performance Scholarship

National Undergraduate Innovative Training Program Funding

National Scholarship for Encouragement

National Student Stipend

3rd Prize in Huazhong Cup of Mathematical Modeling Competition

(*Selected honors are received in China during undergraduate without indication)

Publications

- "Near-field Coupling Estimation by Source Reconstruction and Huygens's Equivalence Principle", accepted to be published on 2015 IEEE symposium on EMC & SI
- "Measurement Validation for Radio-Frequency Interference Estimation by Reciprocity Theorem", submitted to International Symposium on EMC in Germany 2015
- "Radio-Frequency Interference Estimation by Reciprocity Theorem with Noise Source Characterized by Huygens's Equivalent Source", submitted to International Symposium on EMC in Germany 2015