# 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 (Special Class)

## **Related Courses**

Analog/Digital/RF Circuit Antenna Analysis and Design
Interference Control Advanced RF&TD Measurement
Advanced Electromagnetics Computational Electromagnetics

Signal Integrity VLSI Design

## **Research Experience**

#### 1. NF-FF 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. RFI 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. **RFI 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

#### **Related Skills**

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

# **Selected Honors**

National Scholarship for Encouragement

Outstanding Academic Performance Scholarship

National Student Stipend

National Undergraduate Innovative Training Program Funding

Excellent Graduate in Year 2013

3<sup>rd</sup> Prize in Huazhong Cup of Mathematical Modeling Competition

# **Publications**

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

## Website

http://leeo1116.github.io/