# Liang Li

EMC Laboratory, Missouri S&T 4000 Enterprise Dr. Rolla, MO 65401 1ldr7@mst.edu 573-308-6485 04/18/2015

## **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 3.8/4.0, Ranking 2/20 (Honor Class)

#### **Related Courses**

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

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
- Developing a GUI tool for NF-FF transformation

## 2. RF Interference Analysis for Cellphone System

#### (Samsung Sep. 2013-Feb. 2015, Microsoft Mobile Jan. 2015-Present)

- Predicting the coupled noise power from radiation source (IC etc.) to neighboring sensitive RF antenna by near-field scanning technique
- Evaluating RFI issue caused by SMPS switching noise in mixed RF/digital circuits
- Simulating the shielding can effect on RFI estimation
- Integrating the RFI estimation method into simulation tool by macro programming

#### 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. Flexible PCBs with Meshed Ground (Samsung) Feb. 2015-Present

- Developing a design/modelling methodology for flexible PCB with meshed ground for single and differential lines
- Building a GUI tool for the proposed design methodology

#### **Related Skills**

- o **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**\*

Best student paper award in 2015 EMC&SI symposium. Santa Clara, CA

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

Excellent Graduate in Year 2013

Outstanding Academic Performance Scholarship

National Undergraduate Innovative Training Program Funding

National Scholarship for Encouragement

National Student Stipend

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)

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

**IEEE Student Member** 

(\*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, best student paper award (best EMC paper finalist &
  best student paper finalist)
- "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