Bradley Frost

(734) 417-0953 • bfrost@umich.edu • 3658 Hedgerow Drive • Saline, MI, 48176

OBJECTIVE

Seeking a Fall 2014 Internship/Co-Op related to Electrical Engineering or Computer Science.

EDUCATION

University of Michigan, Ann Arbor, MI — April 2015
Bachelor of Science and Engineering in Electrical Engineering — Major GPA: 3.5/4.0
Bachelor of Science and Engineering in Computer Science

- Awards: Dean's List Winter 2013, Dean's List Fall 2013, University Honors Fall 2013
- Relevant Coursework: Digital Integrated Circuits, Microprocessor Systems Design Lab, Data Structures & Algorithms (C++), Semiconductor Optoelectronic Devices, Computer Architecture, Signals & Systems, Logic Design, Programming & Data Structures

Shanghai Jiao Tong University, Shanghai, China — May 2012 – July 2012
Study Abroad

- Participated in cultural excursions to expand my knowledge of Chinese culture and business.
- Volunteered to teach local neighborhood elementary age children English.

PROJECTS

Electronic Stock Market Simulation — June 2014

- Developed a stock market simulation using C++ that took a list of trades as input and performed a variety of operations chosen by the user such as calculating the median trade price and calculating the most optimal time to trade a given equity.
- Gained experience choosing data structures that fit the specification efficiently and allowed for low memory and high-speed performance.

Autonomous Air Hockey Robot — February 2014 – April 2014

- Developed a microprocessor-based system for a competitive autonomous air hockey robot through C programs and ARM assembly to a microcontroller.
- Interfaced several different devices including a Microsoft Kinect, a stepper motor controlled XY coordinate system, an LCD screen, and an N64 controller to a 8051 microcontroller.

8-bit Ripple Carry Adder — February 2014 — April 2014

- Designed an 8-bit ripple carry adder in Cadence Virtuoso schematic editor for optimal delay and energy by strategically using different logic families.
- Analyzed several different circuit designs with spice simulations to gain perspective on how to leverage tradeoffs for optimal performance.

EXPERIENCE

University of Michigan, Solid State Electronics Laboratory — Ann Arbor, MI
Research Assistant — August 2013 – Present

- Further technology in solution-processed transparent thin-film transistors for use in LCD displays.
- Manufacture high-frequency sub-micron transistors to develop RF circuits from amorphous oxide semiconductors.
- Conduct fabrication experiments with different materials and processes to optimize transistors as well as perform electrical testing to measure MOSFET device parameters.

ACTIVITIES

Undergraduate Student Advisory Board — September 2013 – Present

- Facilitate the engagement of undergraduate students in the College of Engineering in the interest of improving living, learning, and social environments by working closely with the College administration.
- Identify and implement solutions to critical problems ranging from student societies to future programs in the University.

Michigan Engineering Consulting Club — January 2013 – Present

- Consult local and global companies on specific projects ranging from systems integration to market analysis.
- Work with small teams to set timelines to complete a full project in a single semester.

SKILLS

Programming Languages: C++, C, ARM/Thumb, Verilog, Matlab
Software: Cadence Virtuoso schematic editor, Eclipse IDE, SPICE, AutoCad