## **CURRENT RESEARCH**

- Energy efficiency, automation, and validation of renewable-energy systems and smart grids
- Context management and learning in Internet of Things (IoT) systems
- Power- and context-aware computing in embedded and mobile systems

#### SKILLS

#### Languages

- Proficient: C++, Java
- Familiar: C, Perl, Python, C# with .NET, JavaScript, JSP, Ruby On Rails

Software

MATLAB, LabVIEW, FPGA Advantage, Quartus II, PSPICE, AutoCAD

### EXPERIENCE

# **PhD Engineering Intern** Summer 2011, 2012, 2013, 2014 Google London [Confidential] Google - Video Ads Developed a testing framework for video ads, decoupling testing between dependent teams Google – Focus backend Developed a tool to search, analyze and debug Google's social backend data Provided granular data access, extensible to common debugging scenarios, while preserving data access permissions Google - Xbid Web frontend development on Java and Google Web Toolkit codebases, including new extensions to GWT Emphasis on designing UIs that are intuitive to users and reusable by developers. Programming Teacher, Pacific Ridge School 2013-present Introduction to Computer Science – C++ and Python. 2008-2010 Software Development Engineer Microsoft – Core Operating Systems Division (Windows) Maintain the multi-language toolset that builds and packages past, present, and future OS versions. Development, testing, release of high-quality updates and features with fast turnaround time. Deliverables: Windows 7 servicing updates Vista SP2 - Windows 7 Operating System and Feature releases **Undergraduate Researcher** 2007-2008 University of Virginia Performed initial research to identify the benefits and problems of an N-Variant System Rewrote Linux kernel to address non-determinism caused by threading and signals Overarching goal was to create a graceful-recovery application framework that is invulnerable to attacks **EDUCATION** University of California, San Diego – Department of Computer Science and Engineering 2010 - present Ph.D. Candidate, System Energy Efficiency Lab (SEELab) M.S. Computer Science (2012) Advisor: Tajana Simunic Rosing

2004 - 2008

University of Virginia – School of Engineering and Applied Science

• B.S., Electrical Engineering, Computer Science

Note: For an Academic Resume, see Curriculum Vitae.