

Elliot Saba

+1 (206) 414-8216, sabae@uw.edu

EDUCATION

- **University of Washington, B.S. (2011) M.S. (2014) Electrical Engineering**, 4th Year Ph.D. student, Focus on **Digital Signal Processing**

SKILLS

- Proficient in **C/C++**, **Python**, **Julia**, **MATLAB**, **C#**, **Javascript**
- Experience with Assembly, Perl, PHP, Objective-C, CUDA/OpenCL
- Topics include **DSP algorithms/analysis**, **classification/machine learning**, **parallelization**, and **optimization** for **real-time systems**.

EXPERIENCE

Teaching

- PMP EE 590 Predoctoral Lecturer**, University of Washington, 2013/14/15
- Created and taught a new Professional Masters Program class, focusing on real-time sensing and control applications of the Windows Phone 8 platform
- Instructed graduate students from various backgrounds in modern mobile development techniques and embedded signal processing applications

Development

- Software Engineering Contractor**, CentroTherm USA, 2014
- Developed a custom sensing/analysis platform for chemical engineering research/development, unifying multiple data sources and sensing modalities

Opensource activities

- Julia developer**, 2013-Present
- Core Julia^[1] developer, responsible for CI infrastructure, stable release branches, platform binaries and all OSX binary dependencies

Research

- Graduate Research Assistant**, UW Department of Computer Science, Ubiquitous Computing Laboratory, March 2014-Present
- Created a Wi-Fi (802.11b/g) decoder for software defined radio to enable completely passive health sensing utilizing existing wireless infrastructure
- Developed signal processing methods to build a spirometry service utilizing mobile phone networks to supplement traditional lung diagnostic methods
- Graduate Research Assistant**, UW Department of Electrical Engineering, Institute for Learning and Brain Sciences, September 2011 – March 2014
- Part of an interdisciplinary team developing novel signal processing methods to analyze cortical rhythms for evidence of cross-frequency coupling

HONORS

- Winner of the 2014 UW CSE Madrona Venture Group Prize (2nd place)
- Recipient of the 2013 Baker Fellowship and 2013 Boeing Fellowship
- Mary Gates Research Scholar, Winter and Spring 2011
- Recipient of the NAACL 2010 Scholarship to attend the JHU Summer School on Human Language Technology, Summer 2010

[1] The Julia Language: <http://julialang.org>