

# STEFAN A SIGURDSSON

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## EDUCATION

### Brown University

Providence, RI, USA

#### *Doctor of Philosophy in Neuroengineering*

2015 – Present

- Advisor: Dr. Arto Nurmikko
- Thesis title: “Developing a Methodology for Submersion of Microdevices into the Cortex”

### University of Iceland

Reykjavik, Iceland

#### *Bachelor of Science in Physics*

2012 – 2015

- Graduated with distinction; Grade: 9.59/10.00

### Waseda University

Tokyo, Japan

#### *Undergraduate Exchange Program*

2014 – 2015

- Researched heat-evoked neuronal action potential generation by patch clamp in the Ishiwata Lab

## RELEVANT COURSEWORK

Design of Computing Systems      Mixed-Signal Electronic Design      Numerical Analysis      Information Theory

## PROJECTS

### Computer Vision: Automated Pick & Place Processing (Python)

- Automated the sorting of sub-mm size silicon dies by Pick & Place machine using the OpenCV library

### FPGA Programming: ARM32 Processor Implemented on a Cyclone II (Verilog)

- Implemented a 5-stage pipelined ARM32 processor in Verilog for course ENGN1640 at Brown University
- Achieved the highest processor frequency of any student for the year 2017

## COMPUTER SKILLS

Languages: Python, Verilog, Matlab, Java, C#, C++

Operating Systems: Linux, Windows

## WORK EXPERIENCE

### University of Iceland

Reykjavik, Iceland

#### *Summer Research Internship*

May – Sept. 2014

- Investigated Debye Sheath phenomena by Monte Carlo plasma simulation in C++

### University of Iceland

Reykjavik, Iceland

#### *Teaching Assistant*

Sept. – Dec. 2013

- Taught first year physics (theory and experimental)

### Carbon Recycling International

Reykjavik, Iceland

#### *Summer Internship*

May – Sept. 2013

- Built Excel models for feasibility studies of expanding international operations

## HONORS & AWARDS

- Awarded for highest graduating grade in the physical sciences at the University of Iceland for the year of 2015
- Honorable Mention at the International Physics Olympiad in 2012
- 2nd Place in the Icelandic National High School Math Competition for the year 2012
- 1st-2nd Place in the Icelandic National High School Programming Competition for the year 2012