# STEFAN A SIGURDSSON

500 El Camino Real, Burlingame, CA 94010, USA
+1-401-489-6161 | stefan.asigurdsson@gmail.com | https://ssigurdsson.github.io/

## WORK EXPERIENCE

**Aven Financial** **Burlingame, CA, USA**

***Full-Stack Software Engineer (****Vue.js/TypeScript/Python/PostgreSQL****)*** Jul. 2020 – Present

- Worked with two other engineers to build an application flow for a secured loan product. This involved schema design, integration with 3d-party financial services, API development, building of front-end views for user data input and collection, and developing our own online notarization service with video conferencing.
- Recently led two junior engineers to develop a second application flow that allows multiple people to apply as co-applicants. This involved re-factoring of a large part of our codebase, and the migration of all existing user data between tables based on updates to our database schema. The effort succeeded with no adverse effects or data issues.
- Outside of regular feature development, I serve as the primary contact for resolving any errors that arise in our production code or integration tests, having developed (and taken ownership of) the related areas of our infrastructure.

## PROJECTS

**Net-Blob: Netcode Visualization Tool** *(Python)* Oct. 2019 – Jan. 2020

- Implemented various networking algorithms relating to online multiplayer gaming within the context of an original networked multiplayer game (server-client model).
- The tool includes the ability to visualize the relevant networking algorithms in action under various simulated network conditions. Gameplay experience is robust at up to 600 ms latency, 50% packet loss.
- Compiled a report on the computational performance of the server (achieved linear scaling with player count).

**BuJo: Habit Tracker** (*Kotlin)* Mar. 2019 – Jul. 2019

- Developed a bullet journal habit tracker application for Android devices.

**Automated Pick & Place Processing: Computer Vision** (*Python)* Aug. 2018 – Oct. 2018

- Automated the sorting of silicon dies by Pick & Place machine using the OpenCV library for my PhD thesis work.

**FPGA Programming: ARM32 Processor Implemented on a Cyclone II** *(Verilog)* Sep. 2017 – Dec. 2017

- Developed a 5-stage pipelined ARM32 processor in Verilog for course ENGN1640 at Brown University.
- Gave a presentation in class explaining how I achieved the highest processor frequency of any student that year.

## EDUCATION

**Brown University** **Providence, RI, USA**

***Doctor of Philosophy in Neuroengineering*** 2015 – 2020

- Advisor: Dr. Arto Nurmikko
- Subject: Development of implantable electronic devices for interfacing with the nervous system

**University of Iceland** **Reykjavik, Iceland**

***Bachelor of Science in Physics*** 2012 – 2015

- Graduated with distinction; Grade: 9.59/10.00

## TECHNICAL EXPERIENCE

- TypeScript/JavaScript/Vue.js/Node.js, Python, PostgreSQL, HTML/CSS, Kotlin/Java/Android SDK, C++
- AWS (S3, ECR, EB, CW, RDS), Docker, Git

## HONORS & AWARDS

- 2nd Place in the 2012 Icelandic National High School Math Competition
- Honorable Mention at the 2012 International Physics Olympiad
- Awarded for highest graduating grade in the physical sciences at the University of Iceland in 2015
- Rank 32 out of 9300 contestants in Google's Coding Competition "Kickstart" round B – 2020