1115 Campus Drive Stanford, CA 94305

# JIHEE HWANG WWW.ALARMRINGING.COM

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#### **EDUCATION**

Stanford, CA Stanford University Expected 2018

- B.S. Candidate in Computer Science, Minor in Linguistics and Japanese. Class of 2018. GPA: 3.8 / 4.0
- Relevant Coursework: Computer Systems / Assembly Language, Object-Oriented Systems Design, Interactive Computer Graphics, AI/Game Theory in Unreal Engine, Math. Foundations of Computing, Intro to Matrix Methods, Vector Calculus for Engineers, VR Engineering, AI Principles & Techniques, Computer Vision
- Teaching Assistant: EE103, Introduction to Matrix Methods

#### **WORK EXPERIENCE**

Research Assistant Stanford Robotics Lab March 2015 – June 2016

- Designed and led a Haptic fMRI Interface (HFI)-compatible motion experiment to analyze the translation of low-dimensional task control signals in the brain to high-dimensional physical muscle coordination
- Experiment developed using C++, MATLAB, Python, and the Haptic Chai library
- · Operated the fMRI in the Stanford Cognitive and Neurobiological Imaging center as a level 2 fMRI user
- · Assisted design and assembly of the next-gen 5-degrees of freedom haptic robot

R&D Intern Korbit June 2016 – September 2016

- Successfully developed a decentralized Ether exchange platform on the blockchain using Ethereum and its Solidity language for Smart Contract functionality. Redux + React framework was used for the application
- Published a research paper on Bitcoin and Ethereum's potential policy changes such as maximum block size change and its financial consequences on a cryptocurrency trading platform

## **TECHNICAL EXPERIENCE / PROJECTS**

- **Personal Portfolio Page** (2016): <a href="www.alarmringing.com">www.alarmringing.com</a>. Built with React. Technical / Design portfolio available here.
- Falcon City (PC/Mac, 2016). A 3-DOF haptic device Novint Falcon-compatible Unity experience, where the user can move around buildings from a top-down view and destroy a city. Generated 3 different haptic textures with C#, works with any VR device that supports Unity including a custom-made VR headset.
- **Shockatron!** (PC/Mac, 2016). A procedurally generated game inspired from music visualizers with rhythm game elements. Developed with Unity and C#.
- Fractal Trip (PC/Mac, 2016). An Oculus and Myo-compatible music visualizer involving procedural fractal generation and interactive audio manipulation from hand gestures. Developed with Unity and C#.
- **Don't Miss It** (PC/Mac/Web, 2016). An Oculus-compatible experience exploring the balance of real life and online social life. Developed with Unity and C#.
- **EcoDot** (Android, 2013). A simulation of utility-based AI agents, which react to inputs by the user using the touch screen. Created with Processing then ported to Android. On Google Play Store.

# **DESIGN EXPERIENCE**

## Web Design

• TEDxDFLHS Home Page (2013), 2 for 1 Home page (2014), Personal Portfolio Page (2016):

Poster Design (Adobe Photoshop / Illustrator)

Stanford Talisman Gala (2014), Spring Show (2015), Winter Show (2016), Gala (2016).

## **SKILLS**

- Programming: C, C++, Java, C#, MATLAB, Python, HTML/CSS, Node.js, React, Redux, Julia, Cryptocurrencies
- · Software: Unity Engine, Unreal Engine, Adobe Photoshop, InDesign, Premiere Pro, After Effects, SolidWorks
- · Languages: Korean (native), English (fluent), Japanese (advanced), Mandarin Chinese (intermediate)