# AS Albert Ilwon Seo

#### CONTACT

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# **SKILLS**

Languages: C (4/5), Python (4/5), Java(3/5), Golang (3/5)

Web: HTML&CSS (3/5), Javascript

(2/5), React (2/5)

**Software:** Git (3/5), Vim (4/5), LaTeX (4/5), GDB (4/5)

# **LANGUAGES**

Korean (Fluent), Japanese (Basic)

#### **INTERESTS**

Violin / Photography / Hamilton / Rock Climbing (Bouldering) / Mechanical Keyboards

# **EDUCATION**

University of California, Berkeley (Berkeley, CA) B.A. Computer Science

GPA: 3.78 | Technical GPA: 3.87

Courses: Data Structures (61B), Algorithms (170), Operating Systems (162), \*Introduction to Machine Learning (189), \*Data Science (100), Security (161), Machine Structures (61C), Web Design (198)

(\* In Progress)

## **WORK EXPERIENCE**

Internal Drive Technology (Palo Alto, CA)
Game Design Instructor

June - Aug 2017

Expected May 2020

- Instructed classes of 8 students in game development and Adobe Photoshop
- Created individual lesson plans, handouts and additional curriculum for students

# **PROJECTS**

Pintos Operating System Extensions - C

CS 162 Project

- Extended the Pintos OS functionality from a bare-bones OS structure
- Implemented scheduling, user programs, syscalls, file system and its cache
- Drew up high level design documentation for each extension to the OS
- High emphasis on concurrency through threads and debugging large systems

Gitlet - Java CS 61B Project

- Created a slim version control system that mimics Git's features
- Designed internal data structures and used Java's serializable interface
- Implemented 13 git commands such as merge, branch, global-log, status

## One Night Ultimate Werewolf - React/Redux

Personal Project

- Designed a web application for a popular board game in React with Redux
- Used socket.io for real-time communication between clients and server
- Constructed React components and used Redux for state management

#### Kingdom Conquering - Python

CS 170 Project

- Used NetworkX's API to visualize graphs and approximate a NP-Hard problem
- Designed 10 custom heuristics to weight nodes in graphs optimally
- Produced worst-case graphs with 50, 100, 200 nodes for other groups to solve

### Memoizer Layer - Golang

CS 61C Project

- Created a memoization layer between client and classifier to improve speeds
- Utilized Goroutines to parallelize requests and improve performance
- Implemented unit tests to catch errors in cache and classifier implementations

#### **ORGANIZATIONS**

Berkeley ANOVA Hackathon Team

Aug 2017 - Dec 2018

- Planned a hackathon for 80+ under-resourced high school students
- Facilitated sponsorship with event venue that reduced expected costs by 50%
- Assisted AP Comp. Sci. students at high schools near Oakland twice a week