# **Zachary Light**

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### **EXPERIENCE**

## **Software Engineer**

# Argon ST, a Boeing Company

June 2019 - Present, Mountain View, CA

- $\cdot$  Write Code in Java and C++ to operate with radio–based communication systems.
- · Works with systems for communication and signal processing.
- · Conducts analysis through high speed computer and FPGAs in embedded systems.
- · Designs and updates complex initramfs systems.

#### **Research Assistant**

### University of California, Merced

January 2019 - May 2019, Merced, CA

- · Expanded the Working Memory toolkit, a reinforcement learning AI that aims to emulate human working memory.
- · Utilized the toolkit to create a solution to the save, ignore, recall (SIR) problem.
- · Created a Four Room task in order to generate the baseline for a hierarchy of working memory.

# **PROJECTS**

## P2T (Picture to Text)

- · Designed for android, using android studio.
- · Creating a note-taking app integrating a file system, picture to text notes, as well as dictation notes.
- · Designed using UML design tools.
- · Tested through internal tests, unit tests, stress tests, and application tests.

#### **Bobcat Class Alerts**

- · Designed website that sends an alert via email when a seat is available in a class at UC Merced.
- · Utilizes a Python backend with HTML/PHP frontend.
- Parses HTML data to read open classes from the school website.
- Uses PHP form submission to add classes mid-run.
- · Uses JSON to store requested classes, easily allowing for the addition of classes or students.
- Ensures a sufficient wait time between requests to avoid putting stress on the school's serve.

#### DouShouQi (Jungle)

- · A rendition of the board game jungle done for HackMerced 2019.
- $\cdot$  I led my team to complete this game in the 36 hour event.
- $\cdot$  Utilizing object oriented concepts to create a dynamic, easily expandable game.
- $\cdot$  Uses OpenGL to draw graphics, through freeglut for C++.
- Used github for group collaboration and version control.

#### SKILLS

C++, Java, Python, Shell, Git, C, MATLAB, Object-Oriented Programming

### **EDUCATION**

### **Bachelors of Science in Computer Science and Engineering**

University of California, Merced • Merced, CA • 2019 • 3.3

# **COURSEWORK**

Algorithm Design and Analysis, Data Structures, Software Engineering, Object Oriented Programming, Operating Systems, Computer Networks, Image Processing, Robotics, Artificial Intelligence, Computer Vision