
EDUCATION

UNIVERSITY OF PENNSYLVANIA (PENN) MSE in Computer and Information Science	Aug 2021 - May 2023 (Expected) Major GPA: 3.77 / 4.0
UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD) BS in Computer Science	Sep 2017 - Jun 2021 Major GPA: 3.96 / 4.0

WORK EXPERIENCES

SOFTWARE ENGINEER , Nanotools Bioscience	Mar 2020 - Jun 2021
<ul style="list-style-type: none">Built a Python GUI application to allow researchers to batch process videos or sets of images using the method researched.Used TKinter, Threading, and Pyinstaller to create an easy-to-use GUI application.Implemented methods to segment cells' boundaries in videos and to extract and analyze traces using image processing, computer vision, machine learning, and signal processing methods.	
SOFTWARE ARCHITECT / ENGINEER , Shanghai Rural Commercial Bank	Sep 2019 - Jan 2020
<ul style="list-style-type: none">Built a personal delivery locker that allows deliveries to be contactless, also provides real-time monitoring system and prevents theft.Used Raspberry Pi with a touchscreen as prototype, Python, TKinter, Bash Shell, GPIO, PHP, MySQL, QR Code, and WeChat API.Produced a locker that allows scanning QR codes and lock control, as well as a WeChat client for managing and picking up packages.	
COMPUTER SCIENCE TUTOR , University of California, San Diego	Apr 2019 - Jun 2020
<ul style="list-style-type: none">Tutored computer science courses and assisted professors by holding office hours, grading homework, and creating exam questions.	
JAVA ENGINEER INTERN , Shanghai Amarsoft Information Technology Corporation	Aug 2018 - Sep 2018
<ul style="list-style-type: none">Managed and serviced a fully dynamic and expandable management system for controlling loans for Wanda Group's financial institution.Utilized Java, Oracle database, Tomcat, and Eclipse to inspect and debug the user privilege management system after product launch.	
FULL STACK DEVELOPER , Shanghai Greenpool Environmental Tech Co., Ltd.	Jun 2017 - Sep 2018
<ul style="list-style-type: none">Plan, build, and maintain the entire architecture of a dynamic website with LAMP model and responsive UI design from scratch.Fully PHP based with a MySQL database storing contents and a complete usable admin system for editing websites.	

PROJECTS AND COMPETITIONS

ONLINE POSTING PLATFORM @ group-social.zhukaihan.com , Philadelphia, PA	Sep 2021 – Dec 2021
<ul style="list-style-type: none">Building, as a team player, a React web software that allows people to join interest groups, post articles, and chat among each other.Responsible for designing wireframes, RESTful API, and MangoDB schema. Programmed both backend with Express and frontend with React. Deployed onto Heroku. Set up tests with Jest and Cypress with Travis CI.	
BOMBING GAME @ bombgame.zhukaihan.com , La Jolla, CA	Mar 2021 - Jun 2021
<ul style="list-style-type: none">Built, as a team player, a multiplayer 3D 3rd-person-view game from scratch, including server-client communication and graphics engine.Responsible for the whole server-client networking system, server game logic, and debugging client graphics.Designed and programmed networking with Asio framework in C++ for one server and up to 4 clients, and game state synchronization.	
STUDENT AND STUDENT HOUSING @ ssh.zhukaihan.com , La Jolla, CA	Mar 2019 - Jun 2019
<ul style="list-style-type: none">Built an application to allow UCSD students to find houses for rent easily without exposing personal information. UCSD students can post houses online for others to rent, as well as their profiles for finding roommates.Researched technologies and developed a majority of this React Native application as a software architect for the team.The application communicates with Firestore asynchronously and utilized Google Sign-In.	
OBSTACLE DETECTION (ECE DESIGN COMPETITION) @ od.zhukaihan.com , La Jolla, CA	Feb 2019 - Jun 2019
<ul style="list-style-type: none">Used technologies to help detect obstacles that may cause patients with Parkinson's disease to fall.Co-lead the team to partition workloads, manage collaboration strategy, advise appropriate technologies.Programmed an iOS data collection software that encoded disparity map from dual-camera system to the alpha channel of an PNG image, stored in local storage and can be exported as a zip archive. Used UIKit, Core Graphics, and AVFoundation with Swift.Trained a single shot detector using Tensorflow to detect obstacles including obstacles, potholes, stairs, edge of sidewalks, etc.Deployed the trained model onto an iOS application with sound alert and visualization using Tensorflow Lite with Objective-C++.	

SKILLS

Languages:

Advanced Proficiency: Java, Python, HTML, CSS, JavaScript
Used to be Advanced Proficiency: C++, C, PHP, SQL

Tools:

Advanced Proficiency: React, git, Mongoose
Intermediate Proficiency: g++, MongoDB, PostgreSQL, Apache, Xcode