

Alan Qi Chen

alanchen1908@gmail.com · (440) 622-4340 · aqchen.com · github.com/alanqchen

Education

Ohio State University

B.S. Computer Science & Engineering GPA: 4.0

Relevant Coursework: Principles of Imperative Computation (CMU), Software 1, Software 2, Systems 1

Columbus, OH

Aug. 2019 - May 2023

Skills

Languages: C, C++, Java, HTML, CSS, JavaScript, Go, Python, PostgreSQL, Redis
Technologies: Git, Docker, Linux

Experience

United Launch Alliance | Software Engineer Intern

- Upcoming summer internship

Denver, CO
May 2021 - Aug. 2021

Caesar Creek Software | Software Engineer Intern

C, Docker, Ghidra, Git, Python

- Worked with a mentor to train in reverse-engineering concepts, including DLL-injection, python packet building/sending, return-oriented programming, and creating a Linux kernel module
- Created a primitive debugger to write breakpoint instructions in virtual memory for use in a team internal reverse-engineering project

Miamisburg, OH
May 2020 - Aug. 2020

Projects

Bear Blog Engine | Personal

Docker, Git, Go, Next.js, PostgreSQL, React, Redis

- Developed a REST API to interact with databases for a blog engine including JWT authentication
- Created a search-engine-optimized and progressive web application frontend utilizing server-side rendering and redux with an admin dashboard to manage posts and editors
- Reduced API request times by 33% using caching in Redis and page load times by 50% using incremental static regeneration
- Integrated Docker and GitHub actions for continuous deployment and development

example.aqchen.com

College Cheque | Team

CSS, Flask, Git, HTML, JQuery, Python

- Created a web application that lets students and parents a tool to receive personalized financial information on over 5,800 US colleges to aid the college decision process
- Used python to parse over 5,000 rows of colleges with incomplete data
- Winner of JPMorgan Chase's "Best FinTech for Good" challenge

aqchen.pythonanywhere.com

Autonomous Robot | Software Lead, Course Team Project

C++, Git, MATLAB, SolidWorks

- Built a PI controller to autonomously move a tri-omniwheel robot on a course to complete tasks faster than any other team using pregenerated coordinates and velocity
- Added course calibration, error correction, and PI controller error logging to tune to above 99% accuracy
- Designed the robot from scratch in SolidWorks and continuously improved the design after tests
- Completed required biweekly milestone tests three days early while working with a tight budget

robot.aqchen.com

Toonify | Personal

Android, Java, OpenCV

- Built an Android app to apply a cartoon filter using the OpenCV library on new or existing photos
- Recently updated to support Android Q and released on the Google Play Store

toonifyapp.aqchen.com

Activities

Code 4 Community | Backend Team

MongoDB, Node.js, React

- Creating a web app for OSU professors and mental health researchers which will allow adolescents with mental health issues to receive articles, activities, and surveys
- Implemented API routes for the backend including fetching posts, registering, and logging in

Aug. 2019 - Present

Awards

Challenge Winner and Overall Finalist

Winner of JPMorgan Chase's "Best FinTech for Good" Challenge out of 19 competing teams and overall Finalist out of over 700 attending students

Hack OH/O

Nov. 2019

Maximus Scholarship

Awarded for academic achievements, including top 3% of class rank

The Ohio State University

Autumn 2019