

# ALAN CHEN

Boston, MA

Phone: (646) 894-0553

E-mail: alan.chen674@gmail.com

## OBJECTIVE

---

Highly skilled and motivated engineer with a passion for both hardware and software. Seeking a full-time position that will allow me to learn more about the vast computer engineering field while making a difference in the world.

## EDUCATION

---

2017-2021      **University of Massachusetts Amherst, ECE Department**, Amherst, MA  
Bachelor of Science – Computer Engineering

## PROFESSIONAL/RESEARCH EXPERIENCE

---

- 06/2021–Present      **Software Engineer, Optum**, Boston, MA
- Developed features on Exception Management Platform that streamlines 10,000+ requests per day
  - Increased fulfillment of requests, reduced resolution time and human errors
  - Delivered a fully functioning application with fast turnaround time (1 week) due to healthcare open enrollment season. This application allows clients to search healthcare providers based on location, accessibility, doctors, specialty, hospitals, and different types of associated organizations.
  - Weekly presentation to business leaders regarding app updates and future features implementation
  - Researched emerging new technology and convinced team members to utilize it
  - **React, Cypress, SpringBoot, MySQL, Jenkins, Docker, Kubernetes, User Auth - KeyCloak**
- 05/2021–Present      **Founder - Engineer, ThunderStrike**, Boston, MA
- Designed UI so users can access resources (raspberry pi) inside datacenters
  - Implemented LightHouse (client-side) for website and network scanning for our main free service
  - Research about security for **ARM processors** and learning about **FPGA**
  - Brainstorming new ideas and evaluating the structure of our start-up, laying out a good foundation
- 06/2019-12/2020      **Software Engineer Intern, Optum**, Boston, MA
- Summer of 2019 –
    - Analyze trends within call center data and presented actionable insights
    - Utilized **Graph Database**, TigerGraph, to improve data query speed
    - Build a react dashboard to visualize data stats
  - Summer - Winter of 2020 -
    - Developed push notification features using **Swift** for iOS app using Airship SDK
    - Tested our apps compatibility with AppleHealth Kit to share fitness data
    - Leveraged use of Cron Job and SQL to automated delivery of email updates to users

## SKILLS

---

**Languages:** Python, Java, JavaScript, React, C, Assembly, Verilog

**Database and Client/Server Technologies:** MySQL, TigerGraph, AWS DynamoDB

**Software Tools:** Docker, Kubernetes, KeyCloak, Cypress, MatLab

**Others:** Cadence, FPGA, Quartus, SPI, UART, Circuits, Synopsys, VLSI, Embedded Systems, Computer Architecture

## INTEREST

---

**Embedded Systems, FPGA, Robotics, Drones, Computer Vision, Investments, Apps**

**VLSI (Chip Design)** - Design CMOS logic gates on virtuoso, extracted netlist, and finally perform simulation\verification

**Investment Tools** - Used Panda and NumPy for real time stock price analytics and send free real time updates to devices

**Object Detection via Drone** - Retrieved live feed from a drone to perform object detection using pre-trained neural networks