EDUCATION

Tufts University — School of Engineering, Medford, MA

Bachelor of Science in Computer Science. Double major in Computer Engineering GPA: 3.81 / 4.00

Relevant Coursework: Algorithms, Data Structure, Machine Structure and Assembly Language, Intro to Digital Logic Circuits, Electrical Systems, Analog electronics, Autonomous Robots with ROS, Linear Algebra, Differential Equations

SKILLS

Programming Languages: C, C++, Python, JavaScript, TypeScript, MATLAB, VHDL **Tools**: Angular, Vue, Node.js, Express, Django, DynamoDB, MySQL, PostgreSQL, Firebase **DevOps**: Git, Makefile, Bash, AWS Lambda, API Gateway, Cloudfront, Grunt.js **Hardware experiences**: integrated circuits designing, power system, embedded microcontrollers, 3D-printing

WORK EXPERIENCES

Covered Security Inc, Boston, MA

Software Engineering Intern

- Designed a system configuration generator to increase product's roll-out speed by 200% using Bash and TypeScript
- Implemented new Angular authentication flow and Express backend schemas validation to support over 10 large enterprises and 2,500 active customers
- Technologies used: Angular, Express, DynamoDB, Amazon Aurora, Lambda, Elastic Beanstalk, CloudFront, Amazon S3

Department of Computer Science, Tufts University, Medford, MA

Teaching Assistant, Research Assistant

- Algorithms: Graded assignments, organized weekly office hours to help students better understand algorithmic concepts, and contributed new homework documentation
- Autonomous Intelligent Robots Lab: Designed a full-stack web application that provides secured, real-time remote access over the Internet to augment Turtlebots's localization and maneuvering capability
- Technologies used: Robot Operating System, WebSockets, MongoDB

Finsify JSC - MoneyLover, Hanoi, Vietnam

Software Engineering Intern

- Enhanced application flow and user experience with new implementation of Vue.js customized search bar and budgeting window for the MoneyLover web-application
- Designed highly reusable REST Express back-end route across web application and native mobile application platforms, that handled image upload and stored uploaded files to Amazon S3 buckets

PROJECTS

Google Calendar CLI, Personal Project - July 2019

- Designed and deployed a command-line tool that securely interacts with authorized Google Calendar using JavaScript
- Abstracted OAuth 2.0 flow by implementing a proxy server that handles authorization protocol for users convenience

Universal Machine, School Project - November 2018

- Implemented a 32-bit virtual machine emulator with segmented memory and 8 registers on a 64-bit machine using C and Hanson's Data Structure
- Optimized the virtual machine through static inlining and by removing data structure's abstraction, resulting in 400% decrease in run-time

Tufts Telepresence Turtlebot, School Project - May 2018

- Designed a telepresence robot with state-of-the-art autonomous maneuvering capability using AMCL localization and SLAM gmapping
- Utilized rosbridge library to create a JavaScript application that communicates with the robot through websocket protocol, hence allowing remote user accessibility

Lindenmayer Systems, Personal Project - May 2018

o Implemented graphical visualizations of Koch curve, Sierpinski triangle, fractal trees, and Barnsley Fern using Java

OTHER ACTIVITIES

- IEEE, Computer Science Exchange, First Year Advisor, WMFO Radio Co-host, Tufts Vietnamese Student Club
- Best new-come project @Tufts hackathon 2017, Dean's List all semester

Sep. 2017 – May. 2021

June. 2019 – Present.

September. 2018 – Present.

June. 2018 – August. 2018