

HAOSONG LI

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EDUCATION

Carnegie Mellon University December 2021

Master of Science in Electrical and Computer Engineering; **GPA**: .3.55/4.0

Related Coursework: Software Engineering, Foundations of Computer Systems

The University of Texas at Austin August 2020

Bachelor of Science in Electrical and Computer Engineering; **GPA**: 3.7/4.0

Related Coursework: Algorithms, Probability, Software Engineering (Web Applications), Software Testing

Illinois Institute of Technology May 2018

Completed undergraduate coursework in Computer Engineering (Transfer to UT Austin); **GPA**: 3.92/4.0

Related Coursework: Object-Oriented Programming/Design I & II, Data Structures

WORK EXPERIENCE

Software Engineer Intern

ZTech, Austin, TX

05/2020-08/2020

- Built a React based website from scratch for a video editing application called Reelable
- Collaborated with three other interns to launch an end-to-end software marketing product integrated with Chatbots
- Managed and deployed Facebook ads with a monthly budget of \$3,000
- Formulated Chatbot design and automated services and boosted lead generation by 10 times
- Steered a six-person engineering team following Agile values and applying scrum framework to manage tasks

PROJECTS

Wildfire Emergency Social Network – CMU

09/2020-12/2020

- Developed a full-stack app with Node and express.js, MongoDB, and Leaflet.js for emergency situations
- Implemented map for civilians to visualize, pinpoint, and report fire locations nearby, and tested with Jest
- Defined use cases for each phase and applied Scrum and Kanban as software engineering method

Dynamic Memory Allocator (malloc) Simulator – CMU

10/2020-11/2020

- Maximized utilization and throughput to 74.3% and 7,379 Kops/sec with segregated free list (circular doubly linked list) implementation, removing footer in allocated blocks improvement, and mini blocks trick

COVID-19 Tracker

06/2020-08/2020

- Devised a React web visualizer to track global pandemic cases with data from disease.sh

Research Match Website – UT Austin

09/2019-05/2020

- Fulfilled full functionality and completed bug-fixing on a Flask based ResearchMatch website, used for matching students' interests with faculty's research project for ECE department at UT Austin
- Embedded matching algorithms on backend and optimized frontend filtering UI
- Obtained over 100 students and 20 faculty members as users with projects listed in two weeks

Internet Comic Database Website – UT Austin

02/2020-05/2020

- Created and crafted a clean-designed website with Angular framework, Bootstrap CSS
- Optimized and assessed whole website functionality using Protractor
- Directed a team of six to arrange meetings to keep up with schedule during pandemic situation

Wireless Communication System Designs for IoT – Research Project

09/2019-12/2019

Supervisor: Prof. Danijela Cabric, University of California, Los Angeles

- Researched ways to enhance throughput and quality of service (QoS) in wireless communication systems
- Quantified maximum throughput of the system applying Water Filling Algorithm with MATLAB
- Authored and published paper "Resource Allocation Methods in IoT Systems Based on OFDMA"

EXTRACURRICULAR & ACADEMIC ACTIVITIES

JPMorgan Chase & Co. Software Engineering Virtual Experience Program Participant

07/2020

- Visualized stock price data to analyze when trading for stocks should occur
- Utilized Perspective open source code to create charts to display date feed for traders

Sanger Learning Center, UT Austin, Academic Peer Tutor

01/2019-05/2020

- Tutored more than 100 students and helped to solve mathematics problems
- Mentored over 50 students with peer academic advising on college life and courses

Academic Research Center, Illinois Institute of Technology, Academic Peer Tutor

01/2018-05/2018

- Fostered students' problem-solving skills involving Electrical and Computer Engineering courses

SKILLS

Programming Languages: Java, Python, C/C++, JavaScript, HTML/CSS, Node.js, SQL, MATLAB

Frameworks: React, Angular, Flask, Express

Version Control: Git