

EDUCATION

Georgia Institute of Technology

Candidate for B.S. in Computer Science - GPA 3.91

December 2022

Candidate for B.S./M.S. in Computer Science

EXPERIENCE

Georgia Tech Research Institute: CIPHER Lab – Software Engineering Intern (Atlanta, GA)

June - August 2021

- Software engineering intern working on data processing and pattern detection research project
- Ingested raw data streams to be processed using Apache Storm topology pipeline
- Queried from Neo4j graph databases and Elasticsearch databases
- Developed frontend features with React, organized with Flow typechecking and Standard JS styling
- Implemented API endpoint calls with Java Apache Spark
- Troubleshooted UI and API bugfixes

Compass 360 Technologies – Software Engineering Intern (Remote)

May - July 2020

- Fullstack developer at a startup that builds a college football VR livestream ticketing platform
- Worked on a small, agile team to design foundational components and core infrastructure pieces
- Developed a RESTful API interface using Express.js (hosted on EC2) for our production AWS RDS MySQL databases
- Built frontend React components styled with the Material-UI framework
- Implemented encryption for sensitive password information in transit and at rest using AES-256-CBC
- Designed background assets using Adobe Illustrator

University of Delaware - Research Intern

June 2017

- Analyzed Graph Theory and Graph Processing
- Generated discrete signal graphs with MATLAB and GSP Toolbox

ADVENT Taiwan – Team Leader, Head Teacher

Summer

- Taught conversational English to Taiwanese students from elementary to middle school
- Helped develop the daily curriculum preparation for English teachers
- Coordinated event planning for schoolwide rallies consisting of songs, games, and skits

2013-2016, 2019

RELEVANT PROJECTS

US Education Data Visualization

May 2021 – August 2021

- Worked with Dr. John Stasko to create data visualizations with D3.js for US education in 2019
- Produced an interactive scatterplot matrix to compare US state statistics by attributes of interest
- Constructed radar charts for each state to evaluate spending and test scoring metrics

Grocery List Website

October 2020 – May 2021

- Built an online group grocery list site using a MongoDB, Express.js, React.js, and Node.js stack
- Implemented front-end call routing using React Router and styled the website using Material-UI
- Designed the database schema to be consistent and enforced between web and database layers
- Resolved the productionizing pipeline to deploy the application on Heroku
- Website link: <https://ramenable.github.io/grocery-app/>

Audio Converter Desktop App

September 2020 – December 2020

- Designed an audio file converter app with Electron.js
- Utilized FFmpeg to convert, trim, denoise, and upload .mp3 files
- Employed async callback functions to provide a smooth user experience

Church Worship Team Availability Planner

June 2018 – August 2018

- Developed an availability-based schedule planner for church worship teams
- Designed relational SQL databases to organize members and availability parameters
- Deployed a Spring Boot container in conjunction with an Apache Tomcat servlet to launch application
- Created an interactive GUI with JavaFX to polish user interface

RELATED COURSES AND SKILLS

TECHNOLOGIES Node, Express.js, React.js, Electron.js, D3.js, SQL, Mongoose, Spring Boot, Apache Tomcat, Apache Spark, Neo4j, Elasticsearch**CODING LANGUAGES** Java, Python, JavaScript, C, HTML/CSS**NON-CODING LANGUAGES** English, Chinese (Mandarin)**TECHNICAL COURSES** Data Structures and Algorithms, Design and Analysis of Algorithms, Artificial Intelligence, Machine Learning, Computer Graphics, Computer Organization, Systems and Networks, Databases, Object Oriented Programming**SOFTWARE** Git, Vim, VSCode, PyCharm, IntelliJ, Figma, Microsoft Office Suite, Adobe Illustrator**INTERESTS** Pho, Chess, Running, Reading