
EDUCATION

B.S. Computer Science, Georgia Institute of Technology

Aug. 2015 - Dec. 2019

- Concentrations: Information Internetworks, Modeling and Simulation, Minor: Physics
- Graduated with Highest Honors (cumulative GPA: 3.97/4.0, major: 4.0/4.0, minor: 3.8/4.0)

EXPERIENCE

Software Engineer, Etude (www.etudereader.com), Atlanta

Sep. 2019 - Present

- Implemented multiple features for the Electron-based smart PDF reader, including persistent non-contiguous text highlighting and table of contents parsing, which worked on 85% of user-uploaded PDF documents without bookmarks.
- Used **PDF.js** and applied **MVVM pattern** for the persistent highlighting feature.
- Fixed hidden race condition between PDF rendering and background computations in the default PDF.js viewer that caused disappearing highlights for large documents.

Front-end Engineer Intern, Pegasus CRM, Atlanta

Jan. - May. 2018

- Worked on a new feature of the web application that allows merchants to organize potential customers into lists.
- Reimplemented the main features of **jQuery** DataTables plugin in **Vue.js** to allow for future custom needs.
- Used **Jira** to manage assigned tickets and **Confluence** to manage documentations.

SOFTWARE PROJECTS

OpenEval - Georgia Tech Mid-term Course Survey (Web Application)

Aug. - Nov. 2019

- Developed a full-stack web application for the Office of Academic Effectiveness at Georgia Tech, with features for students to take surveys and for instructors to manage surveys and view results.
- Utilized **MongoDB** to store survey templates and response data and implemented **Angular** components to render survey forms dynamically based on template **JSON** fetched from the database.
- Integrated Georgia Tech Login Service and Canvas LMS API to determine user type and class enrollment, and used singleton Angular services with Web Storage to manage login state and handle data requests.
- Used **Node.js**, **ldapjs**, **Puppeteer**, **Express**, Salesforce Lightning Design System and **D3.js**.

MARTA Public Transport Management (Web Application)

Oct. - Nov. 2017

- Developed a full-stack web application to manage passenger accounts, transactions, travel histories and review overall traffic and revenue for MARTA (Atlanta's public transport system).
- Used **Redux** with **React-Bootstrap** to synchronize application state such as account balance across front-end routes/pages without making repeated backend requests when user navigates between pages.
- Utilized **MySQL**, **Node.js**, and Sequelize ORM to manage passenger accounts, transactions, station information and individual trip records, and **Express** to expose a **REST API** for these functionalities.
- Deployed the application on **Heroku** and ClearDB.

Python Console Chat Room (Web Application)

Apr. 2018

- Used **Node.js** to develop an online Python console that runs separate Python REPL subprocesses on dynamically created channels and allows multiple users to access the same channel simultaneously as a chatroom.
- Utilized **Socket.IO** to broadcast one user's input/output to all users on the same channel.

Website Port Multiplexer for Heroku

Jul. 2019

- Developed a system that translates TCP port numbers to URL path prefixes using **service workers** and **Node.js** so as to allow multiple servers to be accessed simultaneously from a single port.

Symbolic Script - A Lisp System in JavaScript

Oct. 2019

- Implemented Lisp s-expressions, 'eval' function and macros in **JavaScript**.

Mini Visual Studio Code (Electron Application)

May. 2019

- Developed a basic cross-platform desktop file explorer and text editor in **Electron JavaScript** framework.

Sitting Time Recorder (Mobile Application)

Jan. 2019

- Utilized **iOS** Core Motion and **Android** sensor framework to detect vertical body movements.
- Used **D3.js** to create a calendar heatmap to display recorded daily sitting times.

TECHNICAL SKILLS

Proficient: Python, **JavaScript/TypeScript**, CSS/SCSS, HTML, Git, Bash, Vim**Familiar:** C, Java, Node.js, Express, RxJS, Redux, React/Angular/Vue.js, jQuery, SQL(MySQL), MongoDB**Used:** iOS (Objective-C, Swift), Android (Kotlin), C#, Dart, Go/Golang, PHP