

EDUCATION

B.Sc. Computer Science, Georgia Institute of Technology (cumulative: 3.97/4.0, major: 4.0/4.0) **Aug. 2015 - Dec. 2019**
Relevant Coursework: *Computer Architecture, Operating System, Computer Networking, Relational Database, Information Security*

EXPERIENCE

Frontend Developer, Intern **Pegasus CRM, Decatur, GA** **Jan. 2018 - May. 2018**

- Reimplemented part of existing UI in Vue.js for the team to evaluate viability of the framework.
- Translated designs into Blade templates (Laravel) and SCSS and implemented drag-and-drop/resizing in plain JavaScript.
- Debugged backend PHP (Laravel, CakePHP) code and SSH-ed into production server to perform minor hotfixes.

SOFTWARE PROJECTS

//github.com/GalMunGral

OpenEval *Mid-term course survey (in progress)*

- Integrated Georgia Tech Login Service (CAS) into the Angular application with a Node.js back end.
- Utilized ldapjs (LDAP client for Node.js) to retrieve user information from Georgia Tech's public LDAP server.
- Created UI components using Salesforce Lightning Design System (SLDS).

galmungral.github.io *Portfolio website*

- Devised a mechanism to allow multiple web apps running independently on different internal ports to be accessible through a single port exposed on Heroku servers by mapping port numbers to URL path prefixes.
- Implemented the port-path translation and HTTP traffic routing in Node.js.
- Set up multiple web apps as well as the routing server inside a Docker container to be deployed on Heroku.
- Designed and handcrafted the homepage using vanilla HTML/CSS/JavaScript.

SitBit *Sitting time recorder (proof of concept)*

- Utilized Core Motion (iOS) and sensor framework (Android) to detect vertical acceleration and MySQL to store sensor data.
- Created a data-driven SVG calendar heatmap embedded in (WK)WebView using D3.js.

MARTA Passenger Traffic *Database course project*

- Created a single-page application using React Bootstrap and Redux and built the REST API using Express.js and MySQL.

WebREPL *Online interactive Python shell*

- Utilized the IPC between the Node.js server process and its Python child process to execute user-submitted Python code.

TwoFactor *Two-factor authentication system*

- Crafted HTTP/2 requests to FCM/APNs servers to dispatch push notifications from back end to Android/iOS clients.
- Used Socket.IO to notify the login page when user confirms login on the mobile app.

ReSpotify

- Replicated Spotify UI controls (playback, volume) using React, CSS and Spotify Web Playback SDK.
- Implemented a Flask back end to obtain OAuth 2.0 tokens from Spotify Web API and render the page using fetched data.

NoTube

- Replicated YouTube UI using Angular Material and SCSS and enabled video streaming using Shaka player.

Werk-estacion *Desktop file explorer + text editor built with Electron, React, and styled-components*

WebSocket Server *A Node.js implementation of the WebSocket protocol*

WolframAlpha CLI *Command-line wrapper of Wolfram|Alpha XML API*

CleanWaterCrowdsourcing *Mobile app built using Google Maps SDK and Firebase SDK (course project)*

TECHNICAL SKILLS

Proficient: Bash, Vim, Git, HTML/CSS/JavaScript (ES6+) **Familiar:** C, Java, Python, TypeScript, React.js, Redux.js, Vue.js, Angular.js, Node.js, Express.js, Socket.IO, PHP, jQuery, Sass/SCSS, Bootstrap, SQL, MATLAB **Used:** Android (Java/Kotlin), iOS (Objective-C/Swift/UIKit/SwiftUI), Flutter (Dart), Xamarin (C#), Electron, React Native, NativeScript, Go/Golang