Joseph Cantrell

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https://josephcantrell.org | https://github.com/josephcantrell14

Work Experience

Software Engineer Atlanta, Georgia
Verizon Connect January 2019 – July 2020

- Worked on the Hum Android application using Java, Kotlin, and MVVM structure. Wrote JUnit unit tests in Kotlin.
- Filed two patent applications with Verizon.
- Created a NodeJS database API and corresponding Swagger documentation embedded in a NodeJS website.

Database Engineer Atlanta, Georgia
Secuur.Co December 2017 – February 2018

- Rewrote a JDBC database using MongoDB. The front end utilizes Angular, the Ionic framework, and RxJS, and connects to the database server through a NodeJS server. User authentication includes bcrypt password hashing and salting. User sessions use ExpressJS, Mongoose, and cookies. Deployed to Amazon Web Services.

Technical Assistant Atlanta, Georgia
Georgia Tech College of Computing Help Desk September 2014 – August 2017

- Assisted customers in resolving technical issues involving College servers and general computer troubleshooting.
- Rewrote the Teaching Assistant application website (PHP, JavaScript, MySQLi).
- Created a web interface for modifying the employee MySQL database (PHP, JavaScript, MySQLi).
- Created an online portal for accessing all College class websites (PHP, JavaScript, MySQLi).

Education

Georgia Institute of Technology Atlanta, Georgia
Bachelor of Science: Computer Science June 2014 – December 2018

Skills & Interests

Skills and Programming Languages
Python, Java, Kotlin, C#, C, Assembly, MATLAB, PHP, JavaScript, HTML, CSS, XML, NodeJS, NativeScript, ReactJS, Angular, Ionic, RxJS, jQuery, MySQLi, Cassandra, OracleDB, MongoDB, Swagger, Android, Gradle, GitHub, Maven, Drupal, Plesk, AWS, MediaWiki, Apache, Linux, Adobe Animate, Unity, Godot, Mutex multithreading, OpenCV, MVVM, Agile
Data Structures and Algorithms
Programmed A* heuristic searches, neural network, AVL tree, Prim's MST, hash table, quicksort, state machines, malloc
Game Design
Created two Gameboy Advance games in C. Recreated the Atari game MULE in JavaFX with a five student Agile team.
Secretary - Zeta Beta Tau fraternity - 2014
Managed https://techzbt.com email lists, MySQL database, and website code (PHP, HTML, CSS). Created JavaScript code with the Google Sheets framework to automatically send reminder emails with spreadsheet data twice per week.

Projects

Personal Website – PHP, JavaScript, HTML, CSS
Maintain and expand a personal website at the domain https://josephcantrell.org with an Ubuntu 17.04 Apache server.
Prophet Launcher – GDScript, MySQLi
Published a paid 2D platformer game to the Google Play store using the open source Godot engine and the Python-like GDScript. Includes a MySQLi database for leaderboards. https://josephcantrell.org/games/prophet-launcher.php
Untrumpable - GDScript
Published a free 2D Android and Windows game using the Godot game engine. Untrumpable is downloadable via the Google Play Store and Itch.io. https://play.google.com/store/apps/details?id=com.joseph.untrumpable
Machine Learning – Weka, ABAGAIL (Java), BURLAP (Java)
Classified and filtered data sets using machine learning algorithms. Analyzed each algorithm's performance.
Active Learning – JavaScript, HTML, CSS, ReactJS, NodeJS, MongoDB

My Agile-oriented team of five Georgia Tech students created a generalized instructional web app with which students complete quizzes. ReactJS serves dynamic web content, ChartJS displays statistics, and MongoDB stores application data.