Tim Vaca

2116 Blue Knob Terrace, Silver Spring, MD 20906 | timmv14489@gmail.com | 240-506-9268
Personal Website: **jemiseo.github.io**

Education

University of Maryland — **College Park, MD**
B.S. in Computer Science — *August 2017 - December 2020 (expected)*

Programming Skills

Languages and Technologies: Java, OCaml, C, Shell, JavaScript, Python, Swift, UNIX, Git, OS X, HTML5, CSS3, React.js

Projects

FlavorDex *HTML/CSS/JS, Pug, MongoDB* https://github.com/jemiseo/flavordex

- A Pokédex-esque collection of flavor texts from the Pokémon main series games (currently only includes Korean flavor texts)
- Run with Node.js as well as Express to leverage routing to different parts of the app, displaying different data based on the route
- Draws data from a MongoDB collection to easily render data on-screen through Pug view engine

korean-lookup *Java* https://github.com/jemiseo/korean-lookup

- Features a search box that automatically converts Roman letters to Korean, without the need for knowledge of Korean keyboard layout
- Implements a web scraper that extracts definition and conjugation data from designated websites

Racket-subset Compiler *Racket* Private class project

- Compiler for a subset of Racket
- Implements many functional programming features such as λ-expressions, pattern matching, and tail recursion. Other features are added such as symbol internment

Relevant Coursework

UMD-CS https://github.com/jemiseo/umd-cs *(private)*

- **CMSC132** Object Oriented Programming II - Various Java projects with a heavy focus on data structures such as linked lists and HashMaps
- **CMSC216** Introduction to Computer Systems - Various C projects dealing with dynamic memory allocation, as well as a project in assembly
- **CMSC330** Organization of Programming Languages - Academic projects written in Ruby, OCaml, and Rust. Explores functional programming, cybersecurity, and the parts of a compiler
- **CMSC351** Algorithms - Introduction to techniques in analyzing complexity of elementary algorithms related to sorting, graphs and trees, etc.
- **CMSC389N** Intro to Web Development - Web-based applications using JavaScript, MongoDB, Node.js, React.js, and Express. Includes exercise on RESTful APIs (tested with Postman).
- **CMSC430** Compilers - Various Racket projects that extend a base compiler for a subset of Racket
- **CMSC433** Java Concurrency - Projects that explore Java concurrency and other related technologies such as OpenMPI and Hadoop MapReduce

Work Experience

CapWIN — **College Park, MD**
Software Developer — *March 2019 | Present*

- Add and improve existing functionality under .NET framework to software written in C# and used by first responders in the D.C., Maryland, Virginia area
- Perform routine backups and maintenance of data services, storage, and servers
- Developed additional preference options that made the client easier to use
- Facilitated a transition to a revamped update process, debugging problems that arose as a result