

TIM VACA

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Personal Website: jemiseo.github.io

EDUCATION

University of Maryland
B.S. in Computer Science

College Park, MD

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, tail recursion. Other features are added such as symbol internment

RELEVANT COURSEWORK

UMD-CS [https://github.com/jemiseo/umd-cs \(private\)](https://github.com/jemiseo/umd-cs)

- **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
Software Developer

College Park, MD
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