Brayden Ngo

Nottingham, MD 21236
braydenngo2@gmail.com | 443-882-8139 | braydenngo.github.io

EDUCATION

University of Maryland - College Park, MD August 2020 – May 2024
Bachelor of Science in Computer Science

- GPA: 3.8/4.0
- Courses: Object-Oriented Programming, Introduction to Computer Systems, Discrete Structures, Organization of Programming Languages, Algorithms

SKILLS

- **Languages**: Java, Ocaml, Ruby, C, Rust, SQL, HTML, CSS
- **Tools**: Eclipse, Vim, Visual Studio Code, Visual Studio, Android Studio, DevExpress, Postman, Microsoft SQL Server

EXPERIENCE

Software Developer Intern June 2022 – August 2022
Ruppert Landscape | Laytonsville, MD

- Developed a QR inventory scanner tool for Ruppert's mobile app in Java using Android Studio
- Documented API calls in the Ruppert mobile app using Postman allowing Ruppert developers easier access in tracking and checking API performance
- Used SQL to manage data across databases used at Ruppert for tracking branch information, maintenance requests, job numbers, and built reports using DevExpress in Visual Studio
- Made enhancements to existing Ruppert software such as LMES (Landscape Maintenance Estimation System) and CTS (Contract Tracking System)
- Developed email filtering script to help Ruppert manage invalid emails sent to customers

Systems Engineer Shadowing January 2021 – February 2021
Trident USA | Columbia, MD

- Learned about IP addresses and configuration
- Exposed to VI editor, terminal commands and learned concepts of changing computing storage using RAID levels
- Evaluated methods of virtual communication between computers using SSH and Telnet

PROJECTS

Media Rental Manager - Java
Created a movie and album rental service interface by applying inheritance and other object-oriented concepts. Program includes ability to process text files of a user's orders and outputs a report.

Personal Portfolio Website – HTML, CSS, JavaScript
Developed a personal portfolio website to host resume, provide listing of educational coursework, and has direct messaging page in the contact section. Also, webpage includes linking to social media accounts and stylistic features such as color changing background. Deployed and hosted using GitHub Pages at https://braydenngo.github.io/

Shell Implementation - C
Implemented a UNIX shell with fundamental features such as piping and file redirection by using concepts such as forking, exec functions, piping, dup system calls, and I/O handling.

Interpreter – OCaml
Developed a dynamically typed version of OCaml by implementing a lexer, parser, and interpreter. Applied concepts of context free grammars, abstract syntax trees, recursive descent parsing, and operational semantics.

Regular Expression Engine - OCaml
Implemented a program to convert between regular expressions, NFAs, and DFAs. Utilized higher order programming features along with user defined types to implement algorithms such as epsilon closure, NFA to DFA conversion, and an algorithm to determine if an NFA accepts an inputted string.