

Nabeel Elberry

nabeelberry@gmail.com ○ 240-758-6295 ○ [LinkedIn](#) ○ [Github](#)

Education

University of Maryland, College Park

B.S. Computer Science, Linguistics Minor

College Park, MD

Major GPA 3.12 | May 2024

Coursework: Object-Oriented Programming I and II; Discrete Structures; Computer Systems; Algorithms; Advanced Data Structures; Artificial Intelligence.; Data Science; Android Programming; Linear Algebra; Network and Hardware Security; Compilers

Skills

Coding Languages: Java, Python, C, C++, MySQL, HTML + CSS, Ruby, OCaml, Rust, Kotlin

Developer Tools: Visual Studio Code, Vim, NodeJS, ReactJS, Spring Boot, RestAPI, Git, Flask

Soft Skills: Communication; Teamwork; Attention to Detail; Problem-solving; Work Ethic

O/S: Windows 11, Linux 6, Debian, macOS

Projects

Rymn – Vocabulary Practice | Python, Flask, NodeJS, ReactJS | [Link](#)

April 2022 - Current

- Engineered a robust **Python + Flask API** based vocabulary program, enabling users to store and access terms and definitions for any language
- Designed a user-friendly GUI using **ReactJS**, leveraging packages like pickle lib to seamlessly save program progress, ensuring uninterrupted workflows and enhancing user experience.
- Implemented a scientifically validated Spaced Repetition System (SRS) for optimal memorization, complemented by timely desktop notifications to prompt users for review sessions, enhancing learning efficiency.

Optimal PacMan AI | Python, Tkinter

March 2023

- Taught a version of PacMan in **Python** how to optimize for multiple different factors such as avoiding enemies, eating fruits, as well as fastest time through the course using.
- Employed multiple algorithms such as **Q-Learning**, **Value Iteration**, and **Bayesian Inference** to utilize a Hidden Markov Model to find the best way through the course.

MicroCaml Compiler | OCaml

October 2022

- Developed a program in **OCaml** which handles the lexing, parsing, and evaluating process normally done by a language interpreter
- Handled commands in **OCaml**, separated them into an AST and evaluated them from a context-free grammar

Simulation of UNIX System | C, Unix

April 2021

- Designed and implemented a shell for **Unix** inside of **C** using dynamically allocated linked data structures to simulate files and directories
- Resulted in a working simulation of a shell with the ability to use commands such as “cd”, “ls”, etc... to navigate through a directory

Professional Experience

UMD Division of Information Technology - Terrapin Technology

Hardware Service Technician

May 2023 - Current

- Worked collaboratively with colleagues to efficiently resolve technical issues with students' personal devices, encompassing virus removal, software installation, and diagnosis and resolution of hardware issues.
- Facilitated communication among team members and utilized ServiceNow to meticulously document customer issues across various departments for streamlined workflow.

University of Maryland

Undergraduate Research Assistant – Analysis of Berber using Python | **Python**

June 2023

- Worked with a graduate student and learned Berber's language syntax and figured out how to analyze it to assess frequency of specific phrases within a typical conversation in the language using **Python**
- Used **CHILDES** and **CLAN** to go through the language and separate specific parts of the sentences into linguistic groups for morphological frequency analysis