Nabeel Elberry

nabeelelberry@gmail.com ○ 240-758-6295 ○ LinkedIn ○ Github ○ Website

Education

University of Maryland, College Park College Park, MD
B.S. Computer Science, *Linguistics Minor* *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; Linear Algebra; Network and Hardware Security; Compilers

Skills

Coding Languages: Java, Python, JavaScript, C, C++, MySQL, HTML + CSS, Ruby, Rust, Kotlin, MySQL, MongoDB
Developer Tools: Visual Studio Code, NodeJS, ReactJS, ExpressJS, Spring Boot, Git, Flask
Soft Skills: Communication; Teamwork; Attention to Detail; Problem-solving; Work Ethic
O/S: Windows 11, Linux 6, Debian, macOS

Projects

Let's Talk | Java, Spring Boot 6, Spring Security 3, ReactJS, MySQL | Link July 2024 - Current

- Developed and designed an app to facilitate connections between native speakers and language learners for mutual grammar and vocabulary corrections.
- Implemented robust user authentication in **Spring Boot 6** with **Spring Security 3** , generating and validating **JWTs** based on user roles, and seamlessly integrated with a **ReactJS frontend** for secure session management.
- Leveraged **Spring Boot** to interface with a **MySQL** database, executing comprehensive **CRUD operations** on users, posts, and terms. Applied **Sentiment Analysis** to categorize reading materials into easy, medium, and hard levels.
- Integrated **DeepL API** to provide translation services making the website user friendly, and storing results of translations in the database for enhanced learning resources.

Rymn – Vocabulary Practice | Python, Flask, ReactJS, NodeJS || 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.

Professional Experience

UMD Division of Information Technology - Terrapin Technology
Hardware Service Technician June 2023 - May 2024

- Resolved technical issues and provided support for various Operating Systems including but not limited to **Windows, Linux, MacOS, and GoogleChromeOS** to ensure smooth operation and user satisfaction
- Utilized **ServiceNow** to meticulously **document customer issues** across various departments for streamlined workflow, with a **96% solution rate**.

University of Maryland
Undergraduate Research Assistant – Analysation of Berber using Python | **Python, CHILDES, CLAN** June 2023

- Initiated a project with a graduate student and analyzed Berber's language syntax and 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 analyzation