Mahdi Ali-Raihan

mma2268@columbia.edu | 929-452-8653 | linkedin.com/in/mahdi-ali-raihan | github.com/asder8215 | https://asder8215.github.io/

EDUCATION

Columbia University   **Manhattan, NY**
B.S. Computer Science, 3.68 GPA   Expected May 2025
Relevant Coursework: Data Structure & Algorithm, Advanced Programming in C and UNIX, Advanced Systems Programming, Artificial Intelligence, Introduction to Databases, Natural Language Processing

TECHNICAL PROJECTS

TeXiT   June 2023 - August 2023
- Simple text editor application with remote editing built in C using GTK4, Libadwaita, Blueprint Language for GTK interface, and JSON-C
- Implemented file save functionality, features of tab pages, GTK signal handlers for tab pages and file action buttons (e.g. new file, open file, save file), and serialization/deserialization of JSON strings for communication between server and clients
- Created installation shell script of TeXiT as a Desktop application

TechPrep   November 2022
- Mobile application that prepares users for technical interviews with multiple choice style programming questions
- Utilized Android Studio, Kotlin, and QuizAPI for design, functionality, and creating question bank for the app
- Implemented Topics page of the app using Fragments, Adapter, and Recyclerview objects displaying different question categories (e,g, Linux, DevOps, Docker, etc.) and fetched and parsed JSON response from QuizAPI into a database to persist and pass onto following screens via Intents

Name the Game, Spin the Wheel   February 2022 - May 2022
- Group project featuring an user-centric game allowing the players to imagine a game (e.g. 21, HighLow, etc.) to play on a spinning wheel numbered 1-8
- Utilized Arduino UNO, arcade buttons, stepper motor, wood for the wheel and box casing, portable battery, speaker, and microSD card reader
- Circuited the buttons to the Arduino and programmed button presses to initiate and stop the motor

EXPERIENCE

Ceros   **New York, NY**
Quality Engineer Intern   June 2022 - August 2022
- Performed manual testing and ticketed issues through Jira and Google Doc that expedited the resolution of bugs and enhanced quality of Ceros' TextPlus tool
- Created end-to-end automated testing scripts using Webdriver IO, Cucumber, and TypeScript, which assisted Ceros in efficiently finding bugs in their TextPlus and Previewer tools
- Actively worked in a cross functional team setting with Software Engineers, UX/UI Designers, and Product Managers through agile meetings

LEADERSHIP/DEVELOPMENT

Emerging Leaders in Technology and Engineering   **New York, NY**
Education Fellow   October 2021 - June 2024
- Lead a class of 20+ students each year in engaging discussions, teaching fundamentals of Python and complementing it with different topics like hardware with the MicroBit and game development in Pygame
- Ensured that students are completing the projects assigned and clarified material through office hours
- Communicated with teachers and other fellows on the progress of the class after each lesson

CodePath   **New York, NY**
Student   September 2022 - November 2022
- Developed knowledge in Android Development in Kotlin such as working with Layouts, UI Interaction, RecyclerView, APIs and JSON, Fragments, etc.
- Built several projects in Android Studio: Wordle, Wishlist, and Latest Popular Movie Library (using TMDb API)

SKILLS

- Frameworks/Tools: Git, Jenkins, Jira, GTK4, Libadwaita, Blueprint Markup Language (GTK)
- Language Skills: Bash, C/C++, Java, Kotlin, Python, TypeScript, HTML/CSS/JS