

## Summary

Chemical Engineering Graduate from UK Russell Group University

Interested in Chemical Engineering and Backend Development roles

## Core Competencies

- |                        |                                |                       |                    |
|------------------------|--------------------------------|-----------------------|--------------------|
| • Chemical Engineering | • Python                       | • Backend Development | • Collaboration    |
| • Logical Thinker      | • C                            | • Customer Service    | • Water Treatment  |
| • Result Orientated    | • JavaScript(Node JS)          | • Leadership          | • Project Planning |
|                        | • Relational databases (MySQL) |                       |                    |

## Experience

### *Mathematics Tutor*

2021 -

- Tutored and was responsible for the mathematical development of 4 students every weekend
- Created lesson plans tailored to each students' individual needs
- Created an environment where students were able to become confident and proficient with solving complex problems
- Communicated with the students' parents bi-weekly to discuss progress and concerns
- All four student received GCSE Grades 6-8 (Equivalent to grades A-B)

## Education

Queen Mary University of London | BEng Chemical Engineering

2019 - 2022

### Results

Final grade: 2:1(Upper second-class with honours)

## Projects

### Software Engineering Projects

- Created a Twitter bot that tweets a random facts every 5 minutes using the Twitter API and a random facts API. Script is hosted on Heroku (Lang: Python)
- Produced a script that estimated the value of  $\pi$  with 10,000 random unit points using the monte carlo method. Used the matplotlib library to plot hits and misses to eventually reach a close estimation of the pi and produce a plot that resembles a quarter of a circle. (Lang: Python)
- Blackjack game with a max 5 players and one mandatory card dealer (Lang: C)
- Creating a mock store database with related tables such as users, user passwords and products and order tables. Goal is to host the database on a server and create a rest API with endpoints to allow the public interaction with the database using CRUD functions (Lang: Python & MySQL)
- UK music charts scraper that tracks the movement of a song weekly which is displayed in a text file (Lang: Python)
- Created a to do list app that allows users to add unique to do notes. Allows user to delete note when they have completed a task and functionality to delete all notes. (Lang: Python, Flask, HTML CSS)
- Created discord bot allows users to add YouTube music videos to a queue, to which they can play, skip, pause, resume. Also used discord documentation to handle disconnections from voice channels. (Lang: Node)
- Created command line minesweeper. Used recursion to implement mass digging when a square with no neighboring mines is hit. Used object orientating programming(OOP) to demonstrate a square, mine and a board. (Lang: Python)
- Created a password manager that stores user passwords for different websites using encryption. User can press button to toggle between encrypted and decrypted password. Password manager is based on the lastpass password manager which uses user master password as the encryption key. (Lang: Node, MySQL, ExpressJS, HTML, CSS, Bootstrap)
- Sorting algorithm visualizer which sorts random array of integers visually. (Lang: HTML, CSS, Javascript and Express)
- Created a responsive weather app that used the public OpenWeather API to fetch and display worldwide city data such as temperature, wind speeds, humidity. (Lang: HTML, CSS, JS, NodeJS, Express, Bootstrap)
- Created Spotify app based off the spotify API to present users data about their account, app also shows users their favorites songs and currently playing media. App has a search section component allowing users to search about artist by their name which returns information. (Lang: ReactJS, NodeJS, HTML, CSS, Bootstrap)

**Social Impact:** Completed a sponsored sky dive with a group of friends. Raised a total of £500 for charity

**GitHub:** : <https://github.com/AF-Jama>

**Personal Interests:** Engineering, Programming, Sports, Podcasts(The Joe Rogan Experience and Lex Fridman Podcast), Gaming, Computer Networking.