

# ALEXANDER FAROUZ

703-939-4983 ♦ alexfarouz@gmail.com ♦ github.com/alexfarouz

## Education

---

**George Mason University – Honors College**

**Expected Graduation: May 2025**

*Bachelor of Science in Computer Science*

**GPA: 3.94/4.00**

**Relevant Coursework:** Data Structures and Algorithms (Java), Object Oriented Programming (Java), Low-level Programming (C), Quantum Algorithms, Formal Methods and Models, Linear Algebra, Numerical Analysis.

## Skills

---

**Languages:** Python, Java, JavaScript, HTML, CSS, C, C++, R (introductory)

**Technologies:** Linux, Git, JUnit, React, Spring Boot, Flask, Node.js, Secure Shell, Remote Machinery

## Experience

---

**CloudStation**

**Washington, DC**

*Webmaster*

**May 2023 – Active**

- Engineered fully functional website for CloudStation using React.js, HTML, CSS, and JavaScript
- Features comprehensive forms to allow for business inquiries and other interests between client and vendors
- Over 1000 visits by venue owners/managers, business owners and potential clients; See more - cloudstationusa.com

**Rise Up Kenya**

**Salgaa, Kenya**

*Website Administrator*

**December 2023 – Active**

- Constructed website (hosted via shopify) for donations and server management.
- Currently working on fully transferring donations and server profiles off of shopify onto independent platform
- Raised \$7000+ (Increasing monthly) for those in need, located in Salgaa, Kenya; See more - riseupkenya.org

**George Mason University**

**Fairfax, VA**

*Computer Science Teaching Assistant*

**January 2023 – Active**

- Worked/working as teaching assistant for CS310 (Data Structures and Algorithms, Java), CS211 (Object-Oriented Programming, Java) and CS112 (Introduction to Computer Programming, Python)
- Answered student questions on projects and miscellaneous questions on online forum (Piazza), assisted students with lab assignments during lab periods, proctored tests for all courses
- Aided over 3000 George Mason computer science students in total time as teaching assistant

## Projects

---

**Sorting Algorithm Visualizer**

**March 2024**

- Created a React UI to visualize sorting algorithms such as: merge sort, quick sort, heap sort, and bubble sort
- Implemented primarily using React and JavaScript as well as HTML and CSS, hosted via GitHub Pages

**Machine Learning Heart Disease Detector**

**October 2023**

- Implemented K Nearest Neighbors (KNN) machine learning web app to detect chance of heart disease by training model with csv files (via kaggle) containing heart disease data
- Takes in 14 parameters including age, gender, cholesterol, blood pressure, etc.
- Includes a user interface in HTML and CSS while implementing Flask app by parsing JSON strings through JavaScript into backend done in Python

**Kruskal's Algorithm Simulator**

**October 2023**

- A visual representation of Kruskal's Algorithm fully implemented in Java (with a downloadable executable)
- Includes a GUI with editable graph nodes and graph edges to customize simulation for added capability
- Utilized several self-implemented data structures to implement, including: graphs, binary search tree, set, map

## Awards/Certifications

---

**Honors College Dean's List:** Fall 2022, Spring 2023, Fall 2023

**Johns Hopkins University:** HTML, CSS, and Javascript for Web Developers