# Abdul Rahman El Mahmoud

*Guelph, ON*

github.com/abdulm7 | linkedin.com/in/abdulm7 | abdulm.me

## Education

**University of Guelph** *Guelph, ON*

Bachelor of Computing, Major in Software Engineering with a Minor in Business *Sept 2019 - May 2023*

- **Achievements**: Dean's Honour List (8x) - Graduated with distinction
- **Relevant Courses**: Data Structures, Algorithms, Software System Development & Integration, Parallel Programming, Cloud Computing

## Skills

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|---|---|
| **Languages** | C/C++, Python, JavaScript/TypeScript, Java, SQL, HTML/CSS |
| **Developer Tools** | Linux, Github, AWS, Azure, Kubernetes, React, Node, Terraform, Docker, Firebase, MySQL, Flask |
| **Relevant Skills** | Data Structures, Object Oriented Programming, Communication, Problem-solving, Agile Practices |

## Professional Experience

**Application Developer** *Mississauga, ON*

Kenna *Feb 2024 - Present*

- Full Stack developer with a focus on web applications and frontend development
- Leveraging React, SQL, Node, and Next.js for Application Development.
- Utilizing JIRA for project management, Jenkins CI/CD for multi-environment application deployment, and AWS as a hosting platform.

**Python Developer (Research Assistant)** *Guelph, ON*

University of Guelph *May 2022 - Aug 2022*

- Led the development of a **Python** tool that renders a graph representing colour deficiencies of users based on environment and display. This tool was used as part of a greater system that aims to solve colour deficiencies on digital displays
- Refined and Optimized the visualization tool using the **Plotly** library to increase rendering speed by **9%** and fixed rendering glitches
- Conducted a thorough and investigative **literature review** on Dark Mode in Human Computer Interaction
- Presented comprehensive reports weekly to my supervisor in an **agile** work environment

**Full-stack Developer (Research Assistant)** *Guelph, ON*

University of Guelph *May 2021 - Aug 2021*

- Developed a **Python** algorithm using **spaCy** to extract key information regarding data collection, retention, and sharing in **IoT** data agreements
- Streamlined and optimized the extraction algorithm for the web app, increasing run time speed by **26%**
- Designed and implemented a robust **MySQL** database to store company information, data policies, extraction queries, and query answers
- Spearheaded the Development/Deployment of the **Node.js** frontend and **Python** backend using **cPanel**, allowing hundreds of users to better understand how their agricultural IoT devices collect, retain, and share their data

**Web/App Developer** *Guelph, ON*

Muslim Society of Guelph *Dec 2020 - May 2021*

- Revamped the MSofG's **WordPress** website by updating the aesthetic, adding a blog section, event handling, payment gateways for donations, and account management, testing all features initially on a **developer environment** before pushing it to production
- Initiated the development of the native mobile application using **Flutter** to make the MSofG services accessible on mobile
- Created a **PHP API** to serve as the backend for mobile, allowing the MSofG to update both the web and mobile app through WordPress
- Deployed the WordPress web app using cPanel and released the Flutter mobile app on the Apple App Store and Google Play Store, resulting in a **61%** increase in donations and a **33%** increase in community engagement

## Projects

**Country Reporter** *June - Oct 2023*

React, Python, Docker, Terraform, AWS *github.com/abdulm7/Country-Reporter*

- A **cloud native app** that handles country data and follows the ETL process to generate comprehensive reports on a global and country scope
- Implemented **CI/CD** pipelines for application and infrastructure, using **Kubernetes** for scalability and **Terraform** for ease of maintenance

**What2Do** *May 2023*

Flutter, Python, Firebase, AWS Lambda, OpenAI *github.com/abdulm7/What2Do*

- A **mobile application** aimed to improve productivity by generating daily tasks based on your occupation and goals
- Utilized the **OpenAI API** to generate meaningful tasks and AWS Lambda to serve as the **back-end** of the application