Abdullah Al Amaan

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TECHNICAL SKILLS

Languages: Python, C++, JavaScript, HTML, CSS
Frameworks: Flask
Developer Tools: SolidWorks, Git, Docker, VS Code, PyCharm

EXPERIENCE

Cloud Software Intern — Mar 2023 – Jun 2023
InterCloud Limited — *Dhaka, Bangladesh*

* Leveraged expertise in C++, Flask, Python, and front-end technologies (CSS, HTML, JavaScript) to contribute to innovative cloud-based communication solutions at Intercloud Limited.
* Engaged in back-end API development, emphasizing seamless integration and user experience, advancing the company's goal to provide communication services without reliance on traditional SIM technology and focusing on the scalability and reliability of cloud-based platforms

Mechanical Engineer — Jan 2023 – Present
Electrium Mobility — *Waterloo, ON*

* Utilized SolidWorks for the conceptualization and design of a battery box, ensuring that the final design met specific requirements for durability, space efficiency, and ease of integration with the overall system.
* Optimized the mechanical aspects of the Dutch bike Bakfiets to enhance performance, focusing on streamlining the design for better energy efficiency and ensuring a balance between functionality and user comfort.

Co-Founder and CFO — Dec 2018 – Present
NIBIR — *Jamalpur, Bangladesh*

* Organized and distributed thousands of warm clothing and blankets to vulnerable populations in various neighbourhoods and water-surrounded lowlands during winters, the 2019 floods and the COVID-19 pandemic, ensuring community sustenance and support with NIBIR, a nonprofit voluntary organization.
* Fostered a partnership with local youth forums to plant over 5,000 trees to enhance municipal greenery successfully and executed educational programs on climate change and sustainable living.

PROJECTS

Microblog | *Python, Flask, HTML, CSS, Javascript, Docker* — May 2023 – July 2023

* Designed and developed a full-fledged Microblog platform using Python and Flask frameworks, like Twitter, enabling users to follow, unfollow, message, and update their profiles.
* Implemented interactive features like profile customization, including picture uploads, and real-time status updates.

ETF Portfolio Management System | *C++* — Nov 2023 – Dec 2023

* Demonstrated expertise in object-oriented programming, dynamic memory management, and linked lists, completing a multi-phase project with a focus on financial data structures.
* Efficiently executed algorithms for data sorting and financial calculations, demonstrating problem-solving skills in a structured programming environment.

GeeseSpotter | *C++* — Oct 2023 – Nov 2023

* Developed a Minesweeper-like text-based game, demonstrating proficiency in C++ with a focus on dynamic memory allocation, arrays, and bitwise operations.
* Managed game data manipulation and user interface implementation while handling complex game logic and memory management tasks.

Smart Inhaler | *Embedded C++* — Sep 2023 – Dec 2023

* Developed an innovative smart inhaler leveraging the STM32 Nucleo-64 Development Board, utilizing proficiency in C++ programming.
* Incorporated sophisticated features like automated medication reminders, and a comprehensive medical logging system, for in-depth medical data analysis using circuit designing, enhancing the device's functionality for healthcare monitoring.

EDUCATION

University of Waterloo — Waterloo, ON
Bachelor of Applied Science in Computer Engineering — *Expected graduation: 2028*
* University of Waterloo President's Scholarship of Distinction