

Labib Zaman

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SKILLS

Languages: C++, C, Python, Java, C#, PostgreSQL, JavaScript, Bash, R
Frameworks/Tools: OpenCV, React, Node.js, Express.js, Redux, pandas, NumPy, Firebase
Tools: Linux, Git, MongoDB, AWS, Jira, Jupyter, Figma, Agile

EXPERIENCE

Software Engineer Intern May 2021 – August 2022
Magna *Brampton, ON*

- Developed and optimized **C++ components** for ADAS features (Pedestrian Detection, Auto Parking, etc.), focusing on code efficiency for **real-time** embedded systems.
- Refactored 2000+** lines of legacy code to **improve readability** and achieve a **10% performance gain**.
- Built a **Python-based** CAN translation tool, improving data flow for in-vehicle systems by 25%, ensuring seamless **communication between software and hardware components**.
- Designed and executed **unit tests, simulation scenarios, and test automation** to ensure robust behavior under various conditions (Low Light, etc.), promoting **software reliability**.
- Extended Magna's proof-of-concept **API** with custom plugins, including a **cross-functional logging feature**. Improved algorithm performance monitoring throughout development and testing.
- Contributed to all phases of the **software development lifecycle** (development, testing, deployment) and managed **Git** repositories (32-bit and 64-bit) to ensure code integrity and maintainable deliverables.

Data Analyst Intern Sep 2020 – Apr 2021
Bank of Canada *Ottawa, ON*

- Developed **Python** scripts (*pandas, NumPy*) to **reduce data analysis time by 20%**, streamlining extraction from **large-scale databases**.
- Applied **Agile principles** to deliver iterative software solutions within a cross-functional development team.

EDUCATION

B.S. in Computer Science & Mathematics Toronto, ON
University of Toronto *Dec 2023*
Relevant Courses – Data Structures & Algorithms, Operating Systems

PROJECTS

Car Showcase App | *React.js, Next.js, TypeScript, Tailwind CSS* (🌐) Apr 2024

- Built a performant car showcase platform using **Next.js** for server-side rendering, optimizing SEO and user experience.
- Implemented robust filtering and pagination (**TypeScript**) to refine datasets, ensuring seamless navigation.

Real Estate Marketplace App | *MERN, Firebase, JWT* (🌐) Mar 2024

- Engineered a user-friendly real estate platform with **React, Express, Node.js and Tailwind CSS**, delivering a responsive experience across devices.
- Implemented **secure authentication** using industry-standard protocols (**JWT, OAuth**) and integrated **Firebase** for **backend services**.
- Designed and built **CRUD** functionality for property listings (**MongoDB**), fostering seamless user interactions with the database

MISCELLANEOUS

Certifications: Machine Learning Specialization – *DeepLearning.AI, Stanford University*
AWS Solutions Architect Associate – *Expected June 2024*

Interests: [Photography](#), muay thai, learning languages, travelling, sudoku, tetris, calligraphy