Labib Zaman

in linkedin.com/labibmz

github.com/LabibZ

Experience

Software Engineer Intern

May 2021 – August 2022

Magna International

Toronto, ON

- Played a major the development and integration of advanced algorithms for Auto Parking and Rear Emergency Braking systems using C++ and OpenCV resulting in a 15% improvement in system response time and accuracy in Pedestrian Detection and Parking Line Detection.
- Crafted a robust Controller Area Network (CAN) translation tool using CAN Database inputs in Python, streamlining data communication between software and hardware, reducing integration time by 25%.
- Developed multiple plugins for Magna's proof-of-concept API, introducing a cross-functional logging feature that improved algorithm value tracking and analysis during **development and testing phases**.
- Played a key role in the **software development cycle**, from initial development through testing and deployment, acting as Git Administrator, managing both 32-bit and 64-bit repositories ensuring high-quality deliverables.

IT Systems Development

Sep 2020 – Apr 2021

Bank of Canada

Ottawa, ON

- Created automated Python scripts using pandas and Jupyter for efficient data extraction from large databases, enhancing data analysis productivity.
- Leveraged Active Directory knowledge to create a PowerShell script, automating routine administrative tasks and improving operational efficiency by 35%.
- Engineered a lightweight data-processing application within Excel using VBA, transforming raw data into structured formats, improving data analysis turnaround time by 50%.
- Utilized Agile development methodologies to foster a dynamic, iterative, and collaborative approach to software development.

Projects (Labibz.Github.io)

Full-stack Real Estate Marketplace | MongoDB, Express.js, React, Node.js (\mathbf{Q}) Mar 2024

- Created responsive, intuitive UIs using React and Tailwind CSS.
- Utilized JWT, Firebase, and Google OAuth for secure user access.
- Developed functionality for creating, reading, updating, and deleting real estate listings using MongoDB.
- Implemented advanced search functionality to efficiently match user search criteria.

2D Cafe Simulation Game | Godot, GDScript (Python), Aseprite

(**%** | **(7)** | **(5)**

Nov 2023

- Utilized Godot Engine and GDScript for game mechanics, ensuring a smooth and interactive experience.
- Designed sprites and animations with Aseprite, adding visual appeal and character to the game environment.

Rainbow Six Siege Match Image Reader. | Python, OpenCV, pytesseract, pandas

Sep 2022

- Transformed game match statistics into editable text using OCR technology, streamlining data analysis.
- Leveraged Python, OpenCV, and pytesseract for image processing, with pandas for data manipulation, creating a reliable tool for gamers and analysts.

3D Shooter Platformer Game | *Unity, C#, Blender* (You May 2022

- Built a dynamic 3D shooter platformer, employing **Unity** and **C#** for core development.
- Designed intricate **3D environments** using **Blender**, enhancing visual appeal and immersion.

EDUCATION

University of Toronto

Toronto, ON

Bachelor of Science in Computer Science and Mathematics

Sep. 2018 - Dec 2023

Certifications

Machine Learning Specialization – DeepLearning. AI and Stanford University – Apr 2024

TECHNICAL SKILLS

Programming: C, C++, C#, Java, Python, HTML/CSS, JavaScript, SQL, VBA, Bash, R

Frameworks/Libraries: React, Node.js, Express.js, Redux, pandas, NumPy, pytesseract, OpenCV, Firebase

Tools: Git, MongoDB, JWT, Google OAuth, Jira