Jenneva Li

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Technical Skills

Technical Languages: Java, Python, HTML/CSS, C/C++, RobotC, DAX, M
Developer Tools: AutoCAD, Solidworks, VS Code, PyCharm, IntelliJ, Arduino IDE, Dev C++, Microsoft Office, Power BI, Microsoft Project
Technical Abilities: Power tools, Soldering, Manual drafting, Woodwork, Metalwork, 3D Printing
Languages: English, Cantonese, Mandarin

Experience

Rail Fleet Data Analyst Jan. 2024 – Present
Metrolinx *Etobicoke, ON*

- Utilized Power BI to design and implement 5+ comprehensive dashboard from scratch, and automated processes in cleaning data and building visuals through the use of Power Query, DAX, M, Python scripts, and Excel macros that increased operational efficiency by 60%, empowering the team to allocate resources more effectively and focus on strategic initiatives.
- Managed 5+ Failure Reporting, Analysis, and Corrective Action System (FRACAS) projects and led weekly FRACAS meetings with engineers to update project timelines and ensure project adherence using Microsoft Project.
- Used machine learning to train a hierarchical categorization system in classifying incidents across a diverse dataset of 1000+ units of locomotives, coaches, and DMUs that assists engineers and data analysts in the rail fleet (GO Train) department to pinpoint root causes efficiently.

Mechanical Engineer Mar. 2023 – Jan. 2024
UW Orbital *Waterloo, ON*

- Joined as a team member, collaborating remotely from Surrey, B.C. immediately after receiving an offer of admission from the University of Waterloo for engineering; transitioned to on-site work in September 2023.
- Designed the CubeSat bus (frame) and various mechanical systems such as a battery holder, and conducted Finite Element Modeling for all designed components to assess structural integrity and performance under launch and space conditions
- Achieved first place in the Canadian Satellite Design Challenge (CSDC-6) in 2023

Engineer Jul. 2023
Hack Club– Outernet Hackathon *Cabot, VT*

- Spearheaded the team at the Outernet Hackathon to engineer an interactive water gun system
- Leveraged OpenCV on Python to integrate facial recognition technology into the project, for water squirting activation
- Developed a user-friendly website using HTML, tailored to the unique needs of Hack Club.

Projects

HygieneOptiMate | *RobotC, Lego EV3 Mindstorm* Oct. 2023 – Dec. 2023

- Designed and developed the HygieneOptiMate Robot, leveraging LEGO EV3 Mindstorm technology and RobotC, to optimize personal hygiene routines, including hand-washing, teeth-brushing, and face-washing, to prioritize hygiene by minimizing human touch and reducing the spread of germs.
- Streamline user interaction by enabling one-click operation for instant and fully automated hygiene tasks.

Chatbot | *Python, Discord API* Sept. 2023 – Nov. 2023

- Developed a custom Discord bot to assist users in selecting travel destinations, providing personalized recommendations through Python and Discord API.
- Equipped the bot with tools like DuckDuckGo and TripAdvisor integration, to fetch the latest travel information on destination details, hotel options, and flight updates.

Education

University of Waterloo Waterloo, ON
Candidate for Bachelor of Applied Science in Mechatronics Engineering, Honours *Sept. 2023 – May 2028*
Currently learning: Siemens NX, SQL