Balkarn Gill

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portfolio | linkedin | github

EDUCATION

Master of Electrical & Computer Engineering (M.Eng) - Software Specialization   **Expected: May 2024**

University of Calgary | GSA Academic Vice Chair | 4.0 GPA   *Calgary, AB*

Bachelor of Biomedical & Electrical Engineering (B.Eng)   **Graduated: May 2022**

University of Guelph | Dean's Honour List | Robotic's Team | Engineering Society   *Guelph, ON*

SKILLS

Programming Languages	Python	Java	JavaScript	C	C++	PHP	MATLAB	Simulink
Technologies	MySQL	Node.js	AutoCAD	SolidWorks	ANSYS	Sharepoint	CircuitLab
Data Science & Frameworks	Pandas	NumPy	MatPlot-Lib	React.js	Tailwind CSS	Angular	Django

EXPERIENCE

Systems Analyst   **Jun 2023 - Present**

Zedcor | (Part-Time)   *Calgary, AB*

- Proactively monitor **Genetec system performance**, identify bottlenecks, and implement optimization strategies to enhance system reliability and performance.
- Configure and **program sensors using PHP and mySQL** to enhance security measures and ensure efficient monitoring of critical areas.
- **Increased system efficiency by** ∼**5%** in July 2023 by optimizing red zones, filters, and **training object analytic models**.

Supply Chain & Operations Management   **Oct 2022 - Apr 2023**

Uline | (Permanent Full-Time)   *Milton, ON*

- Led and managed a team of **30+ direct reports**.
- Maintained a focus on **meeting daily volume output targets** while adhering to **strict cut-off hours.**
- Implemented monthly incentives to boost team morale and recognize high-performing employees, resulting in a notable **decrease in the department's error rate from 0.021% to 0.017%.**

IT Consultant / Project Coordinator   **Apr 2022 - Oct 2022**

ATF Transport | (Permanent Full Time)   *Woodbridge, ON*

- Contributed to the successful integration of new fleet management software by **developing a customized solution** that aligned with the company's unique requirements.
- Demonstrated exceptional troubleshooting skills by effectively **identifying and resolving errors in the software** and keeping the staff up to date with the latest functionalities and updates through regular briefings.

Software Developer Intern   **Sep 2021 - Apr 2022**

Carnostic Inc. | (Internship)   *Toronto, ON*

- Assisted the team to build **frontend and backend product features** from start to finish: through **conception, research, implementation, and maintenance**.
- Contributed to the development of the user interface utilizing **Sketch and Figma to visualize the design and Java for implementation.**
- Collaborated with the team to **continuously collect and review customer data** and feedback for optimization opportunities and validation of user experiences.

NOTABLE PROJECTS

Neo Financial's "Tech Thursdays" Web Application   **Aug 2023 - Present**

Full Stack Developer   *Calgary, AB*

- Recognized the need for an **event-specific website** for Neo Financial's weekly tech events in Calgary & Winnipeg, connected with the marketing lead and proactively offered my expertise, assisting with the development of its **front-end using React and back-end using Drupal** to enhance user engagement and event visibility.
- Collaborating with a small **team of software developers** to incorporate many features such as user authentication & authorization, event management, speaker management, registration & ticketing, sponsor & partner management, newsletter subscription, and email notifications, through the **use of APIs and a headless CMS.**

Autonomous Plant Disease Detection Robot   **Jan 2022 - Apr 2022**

Software & Circuitry Lead   *Guelph, ON*

- **Coordinated a team** of interdisciplinary engineers in building an automated "Pathfinder", programmed to weave through rows of plants on its own, **avoiding obstacles** and **detecting signs of disease** in plants.
- Temperature sensor, humidity sensor, and ultrasonic distance sensor were wired and **programmed using Arduino**, a hyperspectral camera was also wired into the design and **programmed using C via a Raspberry Pi**, and **important data points** were **transmitted** using a **Wi-Fi module.**
- Won **1st place** at the university's W22 innovative engineering design competition.