# Balkarn Gill

balkarngill.com | LinkedIn | Github | 647-549-9215 | balkarn.gill@outlook.com

#### **EDUCATION**

Master of Electrical & Computer Engineering (M.Eng) - Software Specialization

*University of Calgary* 

• Organizations/Awards: GSA Academic Committee Vice Chair

Cuadwatada May 2022

**Bachelor of Engineering (B.Eng)** 

University of Guelph

Organizations/Awards: Dean's Honors List, Engineering Society, Robotics Team

**Graduated: May 2022** *Guelph, Ontario* 

Expected: May 2024
Calgary, Alberta

#### WORK EXPERIENCE

**Systems Analyst** 

June 2023 – Present

Zedcor • (Casual part-time)

Calgary, Alberta

- Conduct thorough analysis of business processes and identify areas for improvement, resulting in streamlined workflows and increased productivity.
- Configure and program sensors to enhance security measures and ensure efficient monitoring of critical areas.
- Proactively monitor system performance, identify bottlenecks, and implement optimization strategies to enhance system reliability and performance.

## **Supply Chain and Logistics Manager**

October 2022 - April 2023

Milton, Ontario

*Uline* • (*Permanent full-time*)

- Led and managed a team of 30+ direct reports to optimize performance.
- 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

**April 2022 – October 2022** 

ATF Transport • (Permanent full-time)

Woodbridge, Ontario

- 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 (Front-end)**

September 2021 – April 2022

Carnostic • (Internship)

Toronto, Ontario

- Was responsible for defining, articulating, and executing the UX vision and strategy.
- Significantly contributed to the development of the user interface utilizing Sketch to visualize the design and React.js for implementation.
- Collaborated with key partners to continuously collect and review customer data and feedback for optimization opportunities and validation of user experiences.

### PROJECTS & LEADERSHIP EXPERIENCE

#### **Autonomous Plant Disease Detection Robot**

**January 2022 – April 2022** 

Software & Circuitry Lead

Guelph, Ontario

- Coordinated a team of interdisciplinary engineers in building an automated "Pathfinder" which was 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 1<sup>st</sup> place in the W22 innovative engineering design competition at the university.

#### **Brachycephalic Breed CT-Scan Apparatus**

Research and Development Lead

September 2021 – December 2021

Guelph, Ontario

- Chosen out of 60+ applicants to design product for Dr. Alex Zur Linden from the Ontario Veterinary College.
- Purpose of the project was to create an apparatus that reduces visibility obstructions during CT-Scans for Brachycephalic dog breeds
- SolidWorks and ANSYS were utilized to create a fully working model that met all constraints/criteria of the client.

# **SKILLS**

Languages/Frameworks: Python, Java, JavaScript, MATLAB, C++, TypeScript, React, Pandas, NumPy, Tailwind, Git

Technologies: SolidWorks, AutoCAD, CircuitLab, ANSYS, Revit, ORACLE, Primavera P6, MS Office, Visual 3D