

# SITANSH MEHTA

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## Summary

Self-motivated Mechatronics Engineering student at the University of Waterloo with strong communication skills & a proven ability to collaborate efficiently in an agile setting through 3 previous work terms as a Software Developer.

## Skills

**Languages:** Go, React, C#, JavaScript, C, C++, Python, MongoDB, MySQL, PSQL

**Version Control:** Git, GitHub, Azure DevOps, Bitbucket

**Soft Skills:** Excellent Verbal and Written Ability, Team player, Self-disciplined

## Work Experience

### Full Stack Developer | Skygauge Robotics | Hamilton, ON

*Jan 2024 – April 2024*

- Spearheaded the development, implementation, & adoption of an integrated Inventory Management, Drone Management, & Production Planning System.
- Received a return offer, nominated for Co-op of the Year, and hired part-time to maintain the system.
- Redesigned & developed frontend, backend & database using **PSQL, Go, React, and JavaScript**, replacing an existing minimum viable system to accurately model the company's operations including the office structure, inventory, drone, etc.
- Conducted comprehensive analysis of stakeholder processes in Excel/Notion, identified areas of improvement, and gathered feedback through iterations of mock UIs to ensure the new system met all operational requirements.
- Automated the tracking & management of inventory, bill of materials, purchase orders, serialised parts etc, eliminating human errors and saving 20 hours + per week of manual work.
- Enabled instant insights into inventory levels & production capabilities, improving decision-making and saving the company \$125,000 annually by eliminating the need for a third-party system.
- Developed a CI/CD pipeline in Docker, creating development, production, and test environments using nine Docker containers, laying the foundation for future improvements.

### Software Developer Co-op | RLDatix | Toronto

*June 2023 – Sept 2023*

- Implemented microservice features (e.g., hiding users, sorting user lists, etc.) using C# and Typescript used by 5000+ clients.
- Increased backend testing coverage from 6% to 35% using C#, ASP.NET MVC, and MongoDB to catch bugs.
- Refactored backend using SOLID OOP principles to improve codebase maintainability, scalability, testability.
- Fixed critical bugs within tight release schedules to align product with client needs conveyed by product owners.

### Software Developer Co-op | eButterfly | Waterloo

*June 2022 – Aug 2022*

- Designed 15+ frontend React components with Typescript for a migrations project transitioning from Angular to React.
- Effectively communicated project blockers to technical and non-technical team members leading to quicker solutions.

## Design Team Experience

### Firmware Sub-team Member | UW Formula Electric | Waterloo

*April 2023 - Present*

- Designed and implemented a comprehensive Hard-in-the-loop (HIL) test plan in Python and C++ using the slash framework, FreeRTOS, and CAN communication, to rigorously test the VCU throttle polling task.

## Projects

### Face Tracking Phone Stand | Arduino UNO, Python, OpenCV, SolidWorks

- Researched & purchased sensors, motors, ideated multiple designs options, built prototype, wrote Arduino and OpenCV code, & tested functionality in multiple scenarios.
- Successfully integrated Arduino with face-tracking algorithm resulting in a responsive system with real-time adjustments.

## Education

### Bachelor of Mechatronics Engineering | University of Waterloo (GPA: 3.1/4.0)

*Sept 2021 – Present*

- Relevant Courses: Operating Systems, Data Structures & Algorithms, Digital Logic, Advanced Circuits, Signal Processing,