KESHAV MEHNDIRATTA

(343) 333-7585 | keshav.m@queensu.ca | www.linkedin.com/in/keshav-mehndiratta/

EDUCATION

Queen's University **Kingston, Ontario**

Bachelor of Applied Sciences and Engineering, Mechatronics *Class of 2027*

- **Relevant Coursework:** Data Structure & Algorithms, Computer-aided Design, Robotics, Fluid Dynamics, Thermodynamics

EXPERIENCE

Eat Ur Fridge **Kingston, Ontario**

Co-founder and CTO *December 2024 - Present*

- Leading the development of a mobile app that leverages AI to generate personalized recipes by scanning raw materials and ingredients from users' fridges
- Managing a multidisciplinary team of six to bring product to life, driving progress from ideation to development
- Spearheading product strategy, technology implementation, and user-centric design to create a seamless experience that reduces food waste and enhances sustainability

Queen's Aerospace Design Team **Kingston, Ontario**

Perception Team Lead *August 2024 - Present*

- Leading team of 25+ and developed autonomous UAV landing algorithm for safe landing using custom machine learning model (YOLOv8) and ROS2
- Organizing custom software stack for autonomous flight control of multiple UAVs for a national aerospace engineering competition (AEAC)
- Developing Physics based simulation in Gazebo using PX4 while integrating team CAD designs

Supply Chain Illuminations **Remote, USA**

Full-Stack Developer *July 2024 – September 2024*

- Enhanced the front-end experience for clients by adding user-focused features to the ASSURIoT platform
- Built and optimized user interfaces using Angular, ensuring seamless integration with Java-based back-end services.
- Collaborated with cross-functional teams to deliver high-quality, scalable solutions that improved client satisfaction and system performance

Queen's University Physics Lab **Kingston, Ontario**

Website Developer *June 2021 - August 2021*

- Developed a web-accessible materials and equipment database for undergraduate laboratories using SQL
- Designed the front-end components of the inventory website using HTML, CSS, and JavaScript

PROJECTS

Autonomous Robot for Closed-System Delivery Lab *January 2025*

- Engineered a scaled prototype autonomous robot for package delivery, integrating Arduino microcontrollers, LiDAR, and ROS for real-time mapping, navigation, and obstacle avoidance
- Implemented efficient task coordination system through peer-to-peer communication and advanced path-planning algorithms
- Developed a user-friendly interface for real-time tracking and task management

Automated Fluid Dispenser Lab *March 2024*

- Worked with a team to design a full functional fluid dispenser using CAD
- 3D Printed and assembled the parts to create a life-size prototype
- Used Arduino Uno to automate the fluid dispensing process

SKILLS & INTERESTS

- **Programming Languages**: Bash Scripting, C, C++, Python, MatLab, Java, React.
- **Platforms**: Linux (Ubuntu), WSL, NVIDIA Jetson, Arduino, Raspberry Pi, VS Code, Windows.
- **Tools**: Git/GitHub, Docker, OpenCV, TensorFlow, NumPy, YOLO, ROS2, PX4 Autopilot, LTSpice, Excel.
- **CAD**: SolidWorks, Eagle, Fusion 360, OnShape.
- **Soft Skills**: Leadership, Team Management, Communication, Problem Solving, Collaboration
- **Interests**: Kickboxing, Stand-up Comedy, Content Creation, Hackathons