hariknair139@gmail.com
Ontario, Canada

Hari Nair

LinkedIn | GitHub
+1 (705)-719-8516

harinair.ca

Education

BASc - Mechatronics & Robotics Engineering   *Graduation: Spring 2027*
Smith Engineering at Queen's University

Relevant Coursework: Data Structures and Algorithms, Computer Architecture, Digital Systems, Linear Algebra, Signals and Systems
Extracurriculars: <u>President</u> – Queen's Malayalee Association
Work-Study: <u>Undergraduate Teaching Assistant</u> – APSC 142: Introduction to Programming
Awards: Dean's Engineering and Applied Science Award, Scholarships totalling up to **$10,000**

Technical Skills

Programming Languages: C, C++, C#, Python, JavaScript, TypeScript, SQL, HTML/CSS
Databases: MongoDB, Microsoft SQL Server, Firebase
Web & Frameworks: React.js, Vue.js, Next.js, Blazor, .NET, Redux, Tailwind CSS
Hardware & Robotics: ROS2, OpenCV, SOLIDWORKS, Fusion360
Libraries & Tools: Git, Jira, Confluence, Roboflow, Miro, Figma, Agile (LinkedIn Certified)

Work Experience

Full Stack Developer   *May 2025 – Present*
Scotiabank – Global Banking and Markets

- Engineered and deployed an asset management portal using **Vue.js**, **Tailwind CSS**, **ASP.NET**, and **MS SQL Server** to query relationships between **13,000+** users and trade floor assets.
- Automated asset data retrieval by eliminating manual lookups and saving **over 100 hrs annually** for internal support teams.
- **Revolutionized** IT support workflows by building a **.NET Maui Blazor-Selenium** desktop app to automate o**ver 100+ ServiceNow tasks** including ticket creation and department onboarding.
- **Slashed manual ServiceNow process time by 91%** (from 2 minutes to 10 seconds), freeing the support teams from repetitive data entry to focus on high-priority incidents.
- Led the front-end for an internal networking/coffee chat app from **solely designing** the UI in Figma to **leading development** with Vue.js and Tailwind CSS for a **500+** user base.
- Mentored 2 junior interns and managed the team's workflow by **conducting regular code reviews** and **PR approvals.**
- Spearheaded the 2026 intern recruitment process as a hiring coordinator, from phone screening **100+ applications** to conducting **25+ technical interviews** to select a cohort of 6 interns.

AI & Technology Intern   *May 2024 – August 2024*
City of Orillia

- Initialized an AI HelpDesk Bot categorizing IT tickets, trained on **6000+ tickets**.
- Authored and presented **Generative AI** guidelines to City Council; **received approval and completed within 90 days.**
- Consulted with **5 city-wide businesses**, upgrading equipment and optimizing processes.

Software Developer   *January 2024 – August 2024*
Evstry

- Developed the Evstry website connecting **CMS**, **Figma**, **Webflow**, and **React**, achieving a **60% boost** in consumer engagement.
- Guided a **5-man Agile Team** of software interns, accelerating task completion in less time than expected.

Junior IT Analyst   *April 2023 – August 2023*
JANA Corporation

- Reduced **project planning by 10%** by taking an **Agile** approach, improving development of projects.
- Increased productivity by utilizing tools such as **Jira** and **Confluence** for tasks within projects.

Technical Projects

Autonomous Mobile Robot

- Developed an autonomous robot using **ROS2, Arduino, Python, and C++,** equipped with a camera for object detection.
- Enhanced robot efficiency and safety with **LiDAR-based obstacle avoidance** and a **PID controller**.
- Designed mounts and system architecture for hardware-software integration using **Fusion 360** and **Miro**.
- Integrated **Foxglove** for real-time visualization and analysis of robotics data.
- Implemented **SLAM** using **ROS2** during Summer 2024, improving navigation in complex environments. Learn More

Lane Segmentation for Autonomous Navigation

- Developed and trained **a custom YOLOv11 Road Segmentation Model** for the GM-SAE AutoDrive Challenge II, using a combined dataset of **over 50,000 images**.
- Led the project's data annotation efforts, hosting "annotation nights" and personally **auditing the annotations of 30+ contributors** to ensure dataset integrity.
- Managed the end-to-end data workflow, from collection to augmentation, using **Roboflow** to version and prepare datasets for training.
- Leveraged a **GPU cluster** to train the model, achieving real-time inference speeds with a **Mean Average Precision (mAP50) of 83%.**
- Streamlined the annotation pipeline by building a script with the **OpenAI API** to automatically convert industry existing datasets into the required YOLO format. Learn More