

# KRISHNA MALLICK

✉ Email in LinkedIn 🐙 GitHub 🌐 Website

## EDUCATION

### Ontario Tech University

Bachelor of Software Engineering Honours Co-op

Oshawa, ON

Sept 2022 - April 2026

## RELEVANT COURSEWORK

Data Structures and Algorithms, Deep Learning (Stanford), Relational Database Management, Statistical Methods for Machine Learning, Advanced Web Developer Bootcamp (Udemy), Object-Oriented Programming

## EXPERIENCE

### Software Engineer Co-op - OpenCore

February 2025 – Present

Remote

- Developed websites with up to **5000+ viewers** per month and software using **Next.js** and optimized data pipelines with **Python**, **SQL**, and **PySpark**, enhancing data processing for **7+ businesses** and implementing **ETL workflows**.
- Assisted in the development of a full-stack app with **React**, **Node.js**, **MySQL**, and **Stripe API**, integrating user authentication and payment systems.
- Deployed machine learning models with **TensorFlow**, cutting inference time by approximately **30%** for AI-driven engineering insights.
- Automated deployment with **CI/CD pipelines** using **GitHub Actions**, **Docker**, reducing deployment time by approximately **50%** and improved reliability.

### Software Developer - Blueprint

November 2024 – Present

Oshawa, ON

- Built websites with up to **500+ viewers** per month for NPO's using **Next.js** and internal data visualization tools using **React.js**, **TypeScript**, and **Firebase**, reducing reporting time by up to **40%**.
- Automated data retrieval with **RESTful APIs** and **GraphQL**, integrating third-party financial data to improve accuracy.
- Optimized database queries in **MongoDB**, **SQL**, and **PostgreSQL**, cutting retrieval time by up to **30%**.
- Implemented **CI/CD pipelines** with **GitHub Actions** and **Docker**, accelerating deployments and improving reliability.
- Leveraged **Python** and **Pandas** for data analysis, enhancing reporting and data-driven insights.

### Software & Avionics Team - Ontario Tech Space and Rocketry

October 2024 – Present

Oshawa, ON

- Developed predictive algorithms in **C++** and **Python**, achieving **4.87%** altitude prediction error and reducing deviation by approximately **15%**.
- Implemented real-time telemetry and GPS tracking with **ESP-32**, achieving **98% accuracy** in location data and improving recovery efficiency.
- Optimized avionics software in **C**, increasing data transmission reliability by **30%** in high-altitude conditions.
- Collaborated with other departments on OT Mk II, improving rocket performance by **25%**, reaching **19,774 ft** altitude and **Mach 1.39** velocity.

## PROJECTS

### Birdie | Flutter, FlutterUI, Firebase

January 2024

- A full-stack Android mobile app clone of Twitter that uses **authentication**, **authorization**, and **RESTful routing**.
- Features include the core functionality of tweeting, liking tweets, profile customization, and other operations like notifications, messages, and search.
- Built with Flutter, FlutterUI, Firebase utilizing the **Model-View-ViewModel (MVVM)** design pattern.

### Naan-Stop Wok | React, JavaScript, Firebase

December 2023

- Developed interactive order tracking and management dashboards using **React** and **Firebase**.
- Implemented data visualizations for sales trends, improving decision-making for menu optimization.
- Collaborated with team members to ensure a seamless user experience and alignment with the company brand.

## TECHNICAL SKILLS

**Languages:** Java, Python, TypeScript, JavaScript, Ruby, Java, C/C++, HTML, CSS, SQL, Bash, PHP

**Libraries and Frameworks:** React, Next.js, Node.js, Express.js, Tailwind, jQuery, Scikit-Learn, Pandas, Bootstrap

**Tools:** REST APIs, GraphQL, Postgres, MongoDB, Git

**DevOps:** Google Cloud Platform, Amazon Web Services, GitHub Actions, Docker, CI/CD