Robert Kumar, M.Sc.

github.com/robkumarrr | linkedin.com/in/rob-kumar/ | robkumar.com

Objective

Versatile software development student with 4+ years of research experience in the neuromuscular field, blending academic rigor with hands-on development. Seeking a tech role to apply my diverse skill set and contribute innovative solutions, leveraging both software development knowledge and research insights.

Technical Skills

- **Languages**: Java, Python, JavaScript, C#, SQL, PHP, MATLAB, HTML/CSS
- **Other Tools**: .NET, React, Next.js, Selenium, WordPress, Bootstrap, MaterialUI, TailwindCSS, Git, Jira

Education

Software Development - Advanced Diploma (Co-Op)   **Exp. Grad: Dec 2025**
Mohawk College, Hamilton, ON
- Current GPA: 96.3% (Dean's Honour List 2022-2024)
- _Nominated for Co-Op Student of the Year for 2024 (Internal, Provincial and National)_

Master of Science   **Conferred: Oct 2019**
Brock University, St. Catharines, ON
- Implemented **MATLAB** programs to validate a non-invasive approach for **evaluating the neuromuscular system**.
- Held the highest GPA in my cohort (95%).
- 3 scientific publications, 12+ conference presentations.

Bachelor of Kinesiology (Honours)   **Conferred: Jun 2017**
Brock University, St. Catharines, ON
- First-Class Standing (80%+ average upon graduation)

Relevant Experience

Junior Developer   **May 2024 – Present**
Hero Technical Solutions, Remote
- Engineered dynamic web applications on Zoho Creator, leveraging **JavaScript** to seamlessly integrate Zoho **APIs** for efficient data storage and manipulation.
- Crafted customized workflows for diverse clients, enhancing business processes and streamlining operations within Zoho applications.
- Played a key role in developing a sophisticated matching algorithm using **Python**.
- Utilized **SQL** to produce in-depth analytical reports, delivering actionable insights into various companies' business data.
- Building a machine learning tool with **Python**, **Pandas**, **matplotlib**, and **scikit-learn** to project sales margins using a **random forest model** and optimized **feature extraction**.

Java & Python Peer Assisted Study Sessions Leader   **Jan 2023 – April 2024**
Mohawk College, Hamilton, ON
- Lead 2-3 weekly group study sessions for ~30 students per week, contributing to the 20-25%+ program-wide student participation, and course average improvements by up to 15-17%.
- Facilitate students' learning by enhancing their understanding of **object-oriented programming**, **model-view design patterns**, and **graphical user interface design** in **Java**.
- Improved students' understanding of basic programming principles, including **loops**, **boolean control structures**, **functions**, **string manipulation** and **lists** using **Python**.

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Programming Peer Tutor   **May 2023 – Aug 2023**

Mohawk College, Hamilton, ON

- Tutored students in a one-on-on setting for various languages and topics: **Java**, **JavaScript**, **HTML**, **CSS**, **Discrete Math**, **Bootstrap** and **general programming knowledge.**
- Recipient of the *Student Leader of the Month Award* for July 2023.

Knowledge Mobilization & Grant Facilitation Officer   **Feb 2021 – Dec 2022**

Brock University, St. Catharines, ON

- Improved social media engagement on X and Instagram by over 150%.
- Maintained and updated the Centre for Bone and Muscle Health website using **WordPress** (visit site: https://brocku.ca/bone-and-muscle-health)
- Planned and organized a virtual education forum with over 200 registrants, featuring international and local speakers (more info: https://brocku.ca/bone-and-muscle-health/events/mhef-2021/).

Projects

Portfolio

Visit Site: https://www.robkumar.com
Tools/Languages: **Next.js/React**, **Tailwind CSS**, **Framer Motion, Git** - Hosted on Vercel

- I created a simple and clean portfolio as a hub for my projects and resume.

PASS With Rob Website

Visit Site: https://pass-with-rob.vercel.app/
Tools/Languages: **Astro.js** (**JavaScript** framework), **Markdown**, **YAML, Git** - Hosted on Vercel

- This website was created for the students who join my group study sessions each term.
- For major sessions, I create **Markdown** pages that summarize the topic that was covered, with some walk-throughs where needed.

Scoop.

GitHub Repository: https://github.com/robkumarrr/scoop-dog-app
Tools/Languages: **React**, **Express**, **HTML/CSS**, **Git**

- Developed a location-based web app, enabling dog owners to track and visualize their pet's potty habits on a map.
- Used the **Google Maps API** and **React** to create a user-friendly app for tracking pet trends.

OpenAI NFL Chatbot

GitHub Repository: https://github.com/robkumarrr/nfl-chatbot
Tools/Languages: **Python**, **OpenAI Api**

- Created an NFL chatbot that uses the OpenAI API where users can interact with an "NFL Analyst".
- I implemented the **OpenAI API** and **Python** to create this Discord chat bot.

Volunteering

Founder & President – Graduate Mentorship Program   **Mar 2020 – Aug 2021**

Brock University, St. Catharines, ON

- Established a peer-to-peer mentorship program in the Faculty of Applied Health Sciences, impacting 6 departments and attracting 50+ student members.
- Successfully advocated for faculty-wide support, securing endorsement for the mentorship initiative.
- Led a team of 7 graduate students to facilitate the integration of multiple departments.