Pranav Vishal

☎ 519-807-9596 | ✉ pvishal@uwaterloo.ca | 🌐 www.pranavvishal.ca | ⦿ github.com/pranavishal

EDUCATION

University of Waterloo   Waterloo, ON, Canada
Bachelor of Computer Science   *April 2026*
- Courses: Designing Functional Programs, Elementary Algorithm Design and Data Abstraction, Object-Oriented Software Development (C++), Linear Algebra, Probability, Statistics

TECHNICAL SKILLS

Languages: C/C++/C#, Java, Python, Dart, JavaScript, HTML, CSS, Bash, SQL
Frameworks/Technologies: ReactJS, NodeJS, ExpressJS, Bootstrap, Rest APIs, PyTorch, Tensorflow, OpenGL, Unity, Unreal Engine, SQL, Git, CUDA, GraphQL, OpenGL

RELEVANT EXPERIENCE

Incoming Software Engineering Intern   September 2025 – November 2025
Xtillion   *San Juan, Puerto Rico, USA*
- Incoming Software Engineer on the Data team

Incoming Software Engineering Intern   May 2025 – August 2025
Etherfi   *Toronto, ON, Canada*
- Incoming Software Engineer on the Cash team

Machine Learning Engineer   January 2025 – April 2025
WAT.ai   *Waterloo, ON, Canada*
- Engineered a **FastAPI** backend to orchestrate **GPT** and **Stable Diffusion** models, enabling seamless integration of user requests with backend processing
- Developed a full-stack Machine Learning monitoring dashboard using **Next.js** and **Tailwind CSS**, creating interactive visualizations for real-time model performance metrics and feature importance analysis

Software Engineering Intern   September 2024 – December 2024
Lincoln Electric   *Cleveland, OH, USA*
- Built an image detection program with **PyTorch YOLOv5** to identify machine error sources from real-time camera feeds during stalls, reducing recovery time by 11%
- Designed and implemented **RESTful APIs** using **C#** and **ASP.NET Core**, optimizing data retrieval and processing for complex MongoDB queries, resulting in a 50% improvement in response time

Software Engineering Intern   May 2024 – August 2024
Partho Technologies   *Toronto, ON, Canada*
- Engineered a **Flask** backend with **WebSocket** support to stream real-time model inferences, implementing a pub/sub architecture that handled 50+ concurrent connections with sub-100ms latency

Software Developer Technical Lead   January 2024 – August 2024
UW Blueprint   *Waterloo, ON, Canada*
- Led the development of an Interview Dashboard using **ReactJS**, integrating **MySQL** and Google Calendar APIs, enhancing scheduling efficiency by 20%
- Developed a delegation algorithm in **TypeScript** to assign reviewers to incoming applications, improving the total recruitment process by over 30%

Full-Stack Software Developer Coop   January 2023 – April 2023
ATS Automation   *Cambridge, ON, Canada*
- Improved **Illuminate Connect** response time by 18% through implementing a timeout system in **C++** to prevent log consoles being jammed

TECHNICAL PROJECTS

Venmito Data Engineering ⦿ | *Flask API/Pandas/React/TailwindCSS/Chart.js* December 2024 – January 2025
- Built a data pipeline using **Flask** and **Pandas** to clean and transform multi-format datasets into processed CSVs, then stored them in SQLite with **SQLAlchemy**
- Created a robust **Flask API** and an interactive **ReactJS** frontend with dynamic visualizations powered by **Chart.js**, enabling users to seamlessly explore data with advanced filtering options