Pranav Vishal

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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

Wilfrid Laurier University — Waterloo, ON, Canada
Bachelor of Business Administration — *April 2026*

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

Lincoln Electric — September 2024 – December 2024
Software Engineering Intern — *Hamilton, ON, Canada*
- Optimized MongoDB data retrieval by building efficient C#/.NET **APIs** for complex filtering, including regex and range conditions, resulting in 50% faster processing

WAT.ai — September 2024 – December 2024
Incoming Machine Learning Engineer — *Waterloo, ON, Canada*
- Incoming ML Engineer on the Pitch.AI team, using **Generative AI** to create short films from script pitches

Partho Technologies — May 2024 – August 2024
Software Engineering Co-op — *Mississauga, ON, Canada*
- Developed and deployed a machine learning model using **TensorFlow** and **Keras** for real-time prediction of customer behavior patterns, improving lead conversion rates by 15%
- Integrated natural language processing techniques using **SpaCy** and Transformers to enhance chatbot response accuracy, increasing customer satisfaction scores by 23%

Lincoln Electric — January 2024 – April 2024
Software Engineering Intern — *Cleveland, OH, USA*
- Designed and implemented a multi-threaded event processing system in **C#**, reducing application crashes by 11%
- Established a **MongoDB** client in within a dedicated thread for efficient database communication to enhance reliability in scenarios of database connectivity issues
- Redesigned and refactored a centralized **logging solution** from a legacy system to modern infrastructure, resulting in improved performance and scalability

UW Blueprint — January 2024 – August 2024
Technical Lead — *Waterloo, ON, Canada*
- Led the development of an Interview Dashboard using **ReactJS**, integrating **PostgreSQL** 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%

ATS Automation — January 2023 – April 2023
Software Developer Intern — *Cambridge, ON, Canada*
- Improved **Illuminate Connect** response time by 18% through implementing a timeout system in **C++** to prevent log consoles being jammed
- Utilized **C++** exception handling to catch unreadable **SQL** error codes and display user-friendly error messages

TECHNICAL PROJECTS

3D Scene Virtual Camera ⌨ ▶ | *C++/OpenGL* — July 2022 – September 2022
- Programmed a functioning 3D camera using **C++**, **OpenGL**, and **GLEW**
- Used Object Oriented principles such as inheritance to render multiple instances of shapes on to the scene
- Developed vertex, fragment, and geometric shaders