Resume
Dylan Jayabahu

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EDUCATION & ACADEMIC QUALIFICATIONS

- **University of Waterloo** — *Bachelor of Software Engineering*

WORK EXPERIENCE

- **Embedded Systems and Software Development Intern** **July 2024–Aug 2024**
  Perpion Ltd.

  - Utilize STM32 microcontrollers and apply expertise in C programming to develop highly energy-efficient pulse-width-modulation-based motor control systems
  - Collaborate closely with Perpion Engineers to ensure the seamless integration and optimal performance in existing systems, advancing multiple pending patents
  - Developed a full-stack mobile application to allow users to sign in and view data graphs for battery and motor voltage/current readings, with over 1000 active users

- **Lifeguard & Swim Instructor** **July 2024–Dec 2024**
  YMCA of Three Rivers

  - Teach swimmers of various skill levels: from infants to adults and first-time to advanced swimmers.
  - Instruct lessons of 30-45 minutes for groups of 1-12, teaching a total of over 100 swimmers each week.
  - Develop engaging lesson plans using extensive knowledge from competitive swimming to coach swimmers to the next level
  - Instructed and managed assistant volunteers.
  - Certified Swim Instructor and National Lifeguard with the National Lifesaving Society

- **AI Development and Research Intern** **July 2023–Sep 2023**
  Chirp Inc.

  - Developed an AI system for fall detection using radar sensor data from physical devices.
  - Trained a deep learning model achieving 8x faster inference time and a 5% improvement in F-Score over the baseline model.
  - Enhanced model performance through iterative testing, modifying layers, channels, and activation functions to maximize efficiency.

- **Marketing Intelligence Intern** **July 2023 – Aug 2023**
  Nanorial Technologies Ltd.

  - Completed the Snappea course for digital marketing
  - Managed company website, Facebook, Instagram, and LinkedIn pages, increasing social media engagement by 18%.
  - Developed meta pixels to track user activity, resulting in a 31% improvement in ad targeting effectiveness.
  - Created and optimized digital product advertisements on social media platforms, boosting click-through rates by 21%.

ACADEMIC RESEARCH PUBLICATIONS

- Presentation of **Deep Learning Model for Invasive Ductal Carcinoma Detection in Histopathology Images** at IEEE Canadian Conference on Electrical and Computer Engineering (CCECE); Upcoming sole–author publication in IEEE Explore
- Presentation of **Human Action Detection using Frequency Modulated Continuous mmWave Radar** at the 10th Annual Conference on Vision and Intelligent Systems (CVIS); First–author publication in the Journal of Computational Vision and Imaging Systems (JCVIS), University of Waterloo

PROFESSIONAL CERTIFICATIONS

- **Professional Certificate: Artificial Intelligence Engineering**, IBM (2025)
- **Professional Certificate: Deep Learning with PyTorch, Keras and Tensorflow**, IBM (2025)
- **Data Structures and Algorithms**, GeorgiaTechX (2025)
- **Data Science: Machine Learning**, HarvardX (2025)
- **Collaborative Data Science for Healthcare**, MITx (2025)
- **Data Science: R Basics**, HarvardX (2025)
- **Professional Certificate Computer Science for Artifical Intelligence**, HarvardX (2025)
- **CS50's Introduction to Computer Science**, HarvardX (2025)
- **CS50's Introduction to AI with Python**, HarvardX (2024)