

Justin Joseph

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Skills

- Experience with C++, Python, Java/JavaScript, CSS, HTML, React, Turing, Arduinos, Raspberry Pi, SolidWorks, and AutoCAD
- Projects involving AI, OOP, Machine Learning, Neural Networking, 3D Designing and Tolerancing
- Professional experience troubleshooting Raspberry Pi OS and related external circuits

Work Experience

Kids Great Minds: Robotics & Coding Instructor - (UWaterloo Co-op) May 2022 – September 2022

- Taught key robotic and coding concepts to 150+ students using various formats: hands-on, group work etc. to complete individual remote-control car projects with Python and Raspberry Pi
- Reviewed, updated, and designed robotic instructional manuals and 3 activities for professional use
- Led and collaborated with one or more program assistants and/or volunteers daily to achieve set goals

Lowes Home, Hardware: Customer Service April 2021 – August 2021

- Lowes Service Star Award recipient, recognized for excellent customer service
- Managed customer concerns/issues while prioritizing customer satisfaction and communication

Relevant Experience

Self-Driving Car Simulation

- Combined and integrated JavaScript, HTML, CSS, Machine Learning and Neural Networking to complete a self-driving car simulation webpage with deep learning visualizer of the car's brain
- Program generates 100+ simulated cars at once to find, save and mutate the most efficient/successful route and store it to be used for future test simulations
- Cars autonomously self-adjust their own speed, direction, and proximity to obstacles/lanes

AI Projects – Facial Recognition/Alexa

- Programmed facial recognition software using Python and external libraries that successfully detects upwards of 11 individual faces using a computer's standard front-facing camera.
- Designed an Alexa-style voice recognition personal assistant program that can play music, retrieve general information from the internet and communicate with the user audibly using Python and external libraries

Misc. Projects

- Programmed various arcade style video games (Tetris, Pong, 2D Fighter, etc.) using Python and OOP
- Experience with 3D designing props/parts with precise tolerancing using SolidWorks for personal projects

Elite Soccer - University of Waterloo Varsity Men's & Woodbridge Soccer Club

- Can efficiently manage time to balance a demanding academic and soccer schedule
- Team captain of League 1 Reserve U21 Soccer Team and elite OPDL teams (Woodbridge Soccer Club)
- 3-time Team Ontario Provincial Soccer Finalist, top 50 players in Ontario

Education

BASc, Honours Mechatronics Engineering Co-op Student (UWaterloo) 2021 – 2026

- Named to 2021-2022 President's Academic Honour Roll - over 80% average as a varsity student-athlete
- Team member of Engineering Design Teams building space satellites (mechanical team) and electric vehicles (tractive team)
- Participated in prestigious hackathon, Hack the North 2022, supported by Waterloo Engineering

Loyola Catholic Secondary School 2017 – 2021

- 4.0 GPA, 2021 Ontario Scholar, 97% average in STEM courses and completed French Immersion studies
- Highest Academic Performance Awards in Computer Engineering Technology, Computer Science, English, Mathematics, Physics and Visual and Media Arts
- Sole Schulich Leader STEM Scholarship Nominee 2021

Royal Conservatory of Music (RCM) 2011 – 2018

- First-Class Honours with Distinction Certificates for Piano Theory and Piano Performance - Levels 1-8