

Nainesh Chawda

647-784-9324 | naineshchawda@yahoo.ca | [linkedin.com/in/naineshc](https://www.linkedin.com/in/naineshc) | naineshchawda.com

TECHNICAL SKILLS

Languages: C++, Java, Python

Hardware: Arduino, Raspberry Pi, Sensors, Motors

Digital Skills: Solidworks, Microsoft Office, Google Suite, Microsoft Teams

Creative Tools: Photoshop, Canva, Basic Video Editing

RELEVANT EXPERIENCE

BioTron Mechanical Team Member | *C++, Python* September 2025 – Present

- Applied Agile project design lifecycle, utilizing C++ and SOLIDWORKS to develop outer and inner hand exoskeleton prototypes, reducing prototype iteration time by 15%.
- Created parametric 3D models in SOLIDWORKS and prepared parts for 3D printing and integration.

STEM Club | *Python, Java* October 2023 – June 2024

- Participated in weekly design/building competitions with 12 teams, demonstrating problem-solving skills and earning **2nd place overall** for the year.

Robotics Club | *Python, Java* September 2023 – June 2024

- Collaborated with a group to program the back-end software of a robot to compete in a sumo wrestling challenge, collaborating within a 3-member team.
- Developed robot control algorithms using Arduino and integrated sensor data for autonomous navigation in a sumo wrestling competition.

PROJECTS

Motorized Assistive Device Prototype November 2025

- Designed a motorized assistive arm, producing 3D-printed components and validating assembly, range of motion, and tolerances through physical testing.
- Integrated MG996R high-torque servo motors with an Arduino, along with basic sensors and power regulation, to test controlled actuation and system performance.

Pulse Oximeter July 2024

- Designed and built a simple pulse oximeter using Arduino and optical sensors to monitor heart rate and blood oxygen levels.
- Programmed sensor data acquisition and real-time display on an LED module.

Wearable Heart Rate Monitor May 2024

- Designed and built a wearable heart rate monitor using Arduino and a MAX30102 sensor alongside optical sensors.
- Applied wearable electronics and hardware components to develop a real-time heart rate monitoring device.

WORK EXPERIENCE

Team Leader June 2024 – August 2024

Durham Regional Police *Oshawa, ON*

- Coordinated and motivated a team to collect **3,150 items in 1.5 months**, providing critical support to Durham Outlook for the Needy
- Spearheaded and led a fundraising initiative that generated more than **\$11,000 in two months**, supporting the continued services of Hearth Place Cancer Support Centre

Keyholder Nov. 2021 – Jan. 2024

Booster Juice *Ajax, ON*

- Achieved **1st out of 10 districts** in highest-gross sales during a promotional campaign, exceeding sales goals of other locations by a margin of **13.4%**
- Facilitated staff scheduling and shift management, ensuring smooth operations, and resolving workplace conflicts

EDUCATION

University of Waterloo

Bachelor of Applied Science in Biomedical Engineering

Waterloo, ON

Sept. 2025 – Present