

# KEYON JEROME

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[github.com/keyonjerome](https://github.com/keyonjerome)

[keyonjerome.co](https://keyonjerome.co)

## SKILLS

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- **Proficient:** Angular, Python, Java, Git, HTML/CSS
- **Familiar :** JavaScript, SQL, PHP, C++, Arduino, Dart, Bash, Unix, Adobe Illustrator

## EDUCATION

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**Waterloo, Ontario** **University of Waterloo** **Sept 2020 — 2025**

- Candidate for Bachelor of Applied Science, Honours Mechatronics Engineering
- Relevant Coursework: Digital Computation (C++), Data Structures and Algorithms

## EXPERIENCE

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**Software Developer, Co-op** **STEP Software** **July 2019**

- Developed an interactive note-taking app using Angular 8, PHP, and SQL, with a phpMyAdmin server backend, using Agile workflow and database fundamentals.

**Python Programming Tutor** **Self-Employed** **Oct 2019 — Present**

- Curated student-specific lesson plans covering Python and data-science fundamentals.
- Delivered lesson plans as well as one-on-one skill coaching and training to an eighth-grade student.

**Team Lead, Programming Lead** **Spartan Robotics** **Sept 2016 — June 2020**

- Raised \$6,000 in sponsorships for our team in five months by organizing business presentations and winning a 2019 Raspberry Pi programming contest.
- Taught systems and robotics-level Java concepts to new student programmers.
- Led the design, programming, and budgeting of a 125-lb robot each year.
- Managed a team of 40 students with bi-weekly meetings, while outlining goals using a Kan-Ban system.
- Hosted educational outreach events to K-12 students in our community, teaching Scratch programming.

## PROJECTS

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**Computer Vision for FIRST Robotics - 2019 | Python, Tensorflow, Microsoft Azure** **[GitHub](#)**

- Created an auto-run Raspberry Pi software project to detect field objects using computer vision.
- Relayed vision information (e.g: distance to object) over ethernet to a FIRST Robotics Competition robot.
- Developed PID protocols for robot to automatically drive to detected field objects.
- Generated a machine-learning model using Microsoft's CustomVision.AI, integrated with Tensorflow.
- Winner of the 2019 BOS Raspberry Pi Contest, worth \$2,500 in team sponsorships.

**FIRST Robotics - Robot Code 2018 - 2020 | Java** **[GitHub](#)**

- Implemented a Java controls structure for communication between operator and robot components (e.g: robot drivetrain, operator joysticks, internal safety and power-distribution logic).
- Interfaced sensors with a PID control system for automatic control of robot subsystems (encoders, gyroscopes, limit switches, beam-break sensors).

**LiveLaunch - 2020 | Flutter, EchoAR — HackTheNortheast** **[Devpost](#)**

- Developed a cross-platform mobile app that allows you to view information for rocket launches.
- Leveraged Google's Flutter framework, rocket data APIs, and the EchoAR framework to create an augmented-reality view of each rocket.

**Sendable - 2019 | Angular, Google Firebase — CitizenHacks** **[Devpost](#)**

- Developed an Angular web app to streamline the data-access request law process, allowing Canadians to have full control over the data they provide to their everyday devices and applications.
- Winner of the Norton Rose Fulbright Prize