Ishan Baliyan

Ishan-Baliyan | IshanBaliyan | ishanbaliyan.me

SKILLS

Languages: Java, Python, JavaScript, HTML, CSS,
Frameworks/Tools: React, MongoDB, Express, Node.js, Firebase, JavaFX, Jsoup, TensorFlow, Keras

EDUCATION

University of Waterloo   Waterloo, ON *(Sep 2021–April 2026)*
Bachelor of Computer Science
Courses: *CS 145: Designing Functional Programs (Advanced Level), MATH 137: Calculus 1 for Honors Mathematics, MATH 135: Algebra for Honors Mathematics, ECON 101: Intro to Microeconomics, SPCOM 223: Public Speaking*
Awards: *Faculty of Mathematics Entrance Scholarship $10,000 | Awarded to 5% of students based on Strong Test Scores*

EXPERIENCE

Google Computer Science Summer Institute (CSSI) | *CSSI Scholar*   *July 2021*
- 4-week intensive computer science program organized by Google.
- Selected for advanced-level program cohort with **Firebase** and **JavaScript** curriculum taught by Google engineers.
- Completed product design, development, and software engineering interview workshops.

Harvard University Wadduwage Lab | *Remote Research Intern*   *July 2020 – Present*
- Developing a **Python Deep Learning** algorithm using convolutional neural networks to denoise images of organisms.

UWaterloo Social and Intelligent Robotics Research Lab (SIRRL) | *Research Assistant*   *July 2020 – Present*
- Researching applications of Social Robotics in healthcare (under Prof. Dautenhahn, Canada Research Chair).
- Conducting scoping review of 8000+ papers with team of Professors and Researchers for publication.

MVS Systems Inc. | *Project Consultant (Part-time Job)*   *Aug 2019 – March 2020*
- Contract Partnered with United Nations for robotics Research & Development.
- Built Autonomous systems on prototype robot for detecting land mines in developing countries.
- Designed **Arduino** systems to command motors on robot vehicle in response to computer vision inputs.

PROJECTS

PiggyBank: Finalist at University of Waterloo Engineering Hackathon (EngHack 2021) | Demo
- Role in project, out of 4 team members, focused on front-end design in **React** to build a banking app for youth.
- Placed as Hackathon Project **Winner** against nearly 300 participants.

Chalkboard: Google CSSI Final Project | Demo
- Role in project, out of 3 team members, focused on setting up **Firebase database, Oath2 Google authentication,** and **Python Machine learning** model with TensorFlow JS on the MNIST dataset.
- Project gained nearly 50 unique clones from Google CSSI, the most in a cohort of nearly 50 CSSI students.

Travel Map Personal Project, Full MERN stack app | Demo
- Travel Map app for making reviews of different locations with a user sign-in system.
- Implemented sign in and review system using **MongoDB, Express, React, and Node** (**MERN**).

Personal Website | Demo
- Built entire personal website, along with mobile support, from scratch with **React, SCSS,** and **GitHub Pages.**
- Website received over 500 unique user visits in last 60 days, with over 2000 website event interactions.

EXTRACURRICULARS

***FIRST* Robotics Team 2706** | *Programmer for Autonomous systems*   *September 2018 – July 2021*
- World Division Finalist in the *FIRST* Robotics Competition World Championships (**Top 35 from 4000+ teams**) in 2018 and *FIRST* Robotics World Finalists in the 2021 Game Design challenge (**Top 20 out of 1200+ teams**).
- Programmed autonomous systems in **Java**, while using tools such as GitHub, Scrums, Kanban, and Gantt charts.
- Sponsored $40,000+ by Amazon, Apple and impacted more than 100,000 people in community STEM events.

National *FIRST* Robotics Canada Youth Council | *Youth Council Rep.*   *September 2019 – Present*
- One of 12 National representatives for the 25,000 members of the *FIRST* Robotics Canada organization.
- Lead and Organize National initiatives including Hackathons, Conferences (+speaker), Summer camps, cleanups (featured in local news), and discussions with President of 3M Canada and other professionals.

***SHAD* Entrepreneurship Summer Program at Ryerson University |** *SHAD Fellow, Team Lead*   *July 2019*
- Lived and studied at Ryerson University in downtown Toronto for a full month with daily lectures and workshops from Nobel Prize winners, renowned Professors, and major Canadian executives.
- Led team to invent battery recycling project that won **First Place** in Main Startup competition (judged by Professors).

Interests: Skydiving at 13,500 feet, travelling to different countries, novice at chess.