

## EDUCATION

### ONTARIO TECH UNIVERSITY

#### Master of Computer Science (2023–2025)

- NSERC Canada Graduate Scholarship recipient.
- Bob and Sallie Baun Varsity Scholarship winner for perseverance, teamwork, and work ethic.

### UNIVERSITY OF GUELPH

#### Bachelor of Arts in Mathematical Science, Minor in Computer Science (2019–2023)

- Named to the College of Engineering & Physical Sciences Society of Excellence (87% GPA).
- Top 5 highest first-year averages in Mathematical Science.
- Relevant courses: Calculus, Linear Algebra, Differential Equations, Real & Complex Analysis, Statistics, C Programming, Python, Java, C++, Data Structures, SQL, UI Design.

## THESIS

### The Quantification and Analysis of Second Balls in Soccer

- Developed a framework to define and extract second-ball chains from event-based soccer data.
- Applied machine learning and Markov chain models to quantify the impact of second balls on possession, shot probability, and goal outcomes.
- Produced actionable insights for tactical planning, assisting teams in improving second-ball wins and overall performance.

## TECHNICAL SKILLS

**Programming:** Python, C++, C, Java, SQL

**Data Analysis & Visualization:** Pandas, NumPy, Scikit-Learn, Matplotlib, LaTeX

**Methodologies:** Machine learning, data modeling, simulation, statistical analysis.

## RESEARCH EXPERIENCE

### Graduate Research Assistant

#### ONTARIO TECH UNIVERSITY

(September 2023 – September 2025)

- Worked with Professor Patrick Hung on social robots and human-robot interaction projects.
- Presented research and received feedback at CNIB conferences.
- Collaborated with researchers at multiple UK universities, including University of Cambridge, Aston University, University of Sunderland, and Abertay University.

### Undergraduate Research Assistant

#### UNIVERSITY OF GUELPH

(May 2023 – July 2023)

- Researched De Bruijn Sequences and Universal Cycles under Prof. Joe Sawada.
- Programmed in C using recursive functions and optimized algorithm time complexities.

## TEACHING EXPERIENCE

### Teaching Assistant

#### ONTARIO TECH UNIVERSITY

(September 2023 – Present)

- Led labs, graded assignments, and supported students in introductory programming and modelling/simulation courses.
- Developed skills in oral communication and adapting instruction to varied skill levels.

### Undergraduate Teaching Assistant

#### UNIVERSITY OF GUELPH

(January 2023 – April 2023)

- Invigilated and graded Calculus 2 assessments (MATH 1210).
- Strengthened organization, time management, and professionalism.

## SOCcer EXPERIENCE & ACHIEVEMENTS

### Varsity Soccer – Ontario Tech Ridgebacks & Guelph Gryphons

- Played 6 years of varsity soccer, winning OUA Championships in 2021 and 2024; placed 4th nationally.
- USPORTS All-Canadian; three-time OUA All-Star.
- Awarded Most Improved Player across all varsity sports at University of Guelph (2019–2022).

### Guelph United FC (Semi-Professional)

**Played 4 years:** League 1 Ontario Champion in 2021, earning all-star honors.

**Key Skills Demonstrated:** Teamwork, leadership, high-pressure performance, mental resilience, tactical awareness.