

# Jay Sivathayalan

✉ [jsivatha@uwaterloo.ca](mailto:jsivatha@uwaterloo.ca)

## EDUCATION

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<b>Doctor of Philosophy, Biostatistics</b> <i>University of Waterloo</i>	September 2024 – Present
<b>Master of Mathematics, Biostatistics</b> <i>University of Waterloo</i>	September 2023 – August 2024
<b>Bachelor of Mathematics Honours, Statistics</b> <i>Carleton University</i>	September 2019 – December 2022

## AWARDS

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<b>Provost Doctoral Entrance Award</b> <i>University of Waterloo</i>	September 2024
<b>Statistics &amp; Actuarial Science Chair's Award</b> <i>University of Waterloo, Department of Statistics and Actuarial Science</i>	May 2024
<b>W.F. Forbes Entrance Award</b> <i>University of Waterloo, Department of Statistics and Actuarial Science</i>	September 2023
<b>Senate Medal for Outstanding Academic Achievement</b> <i>Carleton University</i>	June 2023
<b>Ontario Graduate Scholarship (declined)</b> <i>Carleton University</i>	April 2023
<b>Constance van Eeden Scholarship (declined)</b> <i>University of British Columbia</i>	February 2023
<b>A.D. Dunton Scholarship</b> <i>Carleton University</i>	June 2022
<b>J. Lorne Gray Scholarship</b> <i>Carleton University</i>	June 2021
<b>Douglas K. Dale Scholarship in Statistics</b> <i>Carleton University, School of Mathematics and Statistics</i>	May 2021
<b>Clarence C. Gibson Scholarship</b> <i>Carleton University</i>	June 2020
<b>President's Scholarship</b> <i>Carleton University</i>	June 2019

## RESEARCH

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### **MMath Research Paper** | *Supervisor: Dr. Michael Wallace*

May 2024 – Present

- Paper completed in August 2024 as part of requirements for MMath
- Investigating the impact of measurement error in the tailoring covariate and the effect of group membership

### **Honours Project** | *Supervisor: Dr. Patrick Farrell*

September 2022 – January 2023

- Completed honours project as part of undergraduate degree requirements in January 2023
- Project consisted of a comparison between design- and model-based estimation, with a simulation comparing examples from each framework
- Presented the project at the 2023 Technological Advances in Science, Medicine and Engineering Conference

### **NSERC USRA** | *Supervisor: Dr. Sanjeena Dang*

May 2022 – August 2022

- USRA awarded in April 2022
- Developed framework for multivariate Poisson log- $t$  mixture models for clustering discrete data, with applications in bioinformatics
- Evaluated model performance on clustering simulated and real-life data in R
- Presented poster at 2023 Canadian Statistics Student Conference

### **Dean's Summer Research Internship** | *Supervisor: Dr. Sanjoy Sinha*

May 2021 – July 2021

- DSRI awarded in April 2020 by Carleton University's Faculty of Science
- Studied theory behind logistic regression and expanded on an algorithm for model creation from one variable to multiple variables
- Analyzed patient data to evaluate risk factors for liver disease using a logistic regression model

## TEACHING

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### **Graduate Teaching Assistant** | *University of Waterloo*

September 2023 – Present

- Grading assignments, midterms, and finals
- Proctoring midterms and finals
- Holding weekly office hours, monitoring online forums, running tutorials
- Head TA for STAT 231 in Winter & Spring 2024, and STAT 230 in Fall 2024: reviewed work of grading team, handled regrade requests
- **Courses:** STAT 206, STAT 230, STAT 231, STAT 330, STAT 332, STAT 431

### **Undergraduate Teaching Assistant** | *Carleton University*

September 2020 – December 2022

- Graded assignments, tests, and finals
- Proctored tests
- Held weekly tutorials and office hours
- **Courses:** BIT 1001, MATH 1004, MATH 1007, MATH 1104, MATH 1800, MATH 2004

## VOLUNTEER POSITIONS

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### **Student and Recent Graduate Committee** | *Secretary*

September 2024 – Present

Secretary from September 2025 to the present; member as CSSC Co-chair from September 2024 to May 2025.

### **Ontario Universities Sports Analytics Conference** | *Secretary*

November 2024 – March 2025

Conference held on March 1st, 2025 at the University of Toronto (St. George campus).

### **UWaterloo Analytics Group for Games and Sports** | *Treasurer/Operations Lead*

October 2024 – April 2025

### **2025 Canadian Statistics Student Conference** | *Co-Chair*

July 2024 – May 2025

Conference held on May 24th, 2025 at the University of Saskatchewan.

### **2024 Canadian Statistics Student Conference** | *Fundraising*

September 2023 – June 2024

Conference held on June 1st, 2024 at Memorial University at Newfoundland.

### **2023 Canadian Statistics Student Conference** | *Local Organization*

September 2022 – May 2023

Conference held on May 27th, 2023 at Carleton University.

### **Carleton Math Society** | *Treasurer*

May 2021 – December 2022

