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## **Mrs. Emily Karen Vandermeer**

Correspondence language: English

Date of Birth: 8/04

Canadian Residency Status: Canadian Citizen

Country of Citizenship: Canada

## **Contact Information**

The primary information is denoted by (\*)

### **Address**

#### Home

11136 18 Ave NW  
Edmonton Alberta T6J 4T9  
Canada

#### Primary Affiliation (\*)

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Canada

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### **Email**

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Work evanderm@ualberta.ca

### **Website**

Social Media [www.linkedin.com/in/emily-vandermeer-419b06201](http://www.linkedin.com/in/emily-vandermeer-419b06201)

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Protected when completed

## Mrs. Emily Vandermeer

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### Language Skills

Language	Read	Write	Speak	Understand	Peer Review
English	Yes	Yes	Yes	Yes	Yes
French	Yes	Yes	No	Yes	No

### Degrees

2024/9	Master's Thesis, Thesis Based Masters, Computing Science, University of Alberta Degree Status: In Progress Research Disciplines: Computer Science Supervisors: Denilson Barabosa, 2024/9 - 2026/8
2019/9 - 2024/5	Bachelor's, Bachelor of Science, Computing Science, University of Alberta Degree Status: Completed

### Credentials

2023/5	Data Wrangling, Analysis and AB Testing with SQL, UC Davis Course on Validating and cleaning datasets and solving problems using SQL, offered through Coursera
2023/5	Course on Research Ethics based on the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022), Panel on Research Ethics A certificate on the ethics of doing research involving humans
2023/5	SQL for Data Science, UC Davis Course that teaches the methods of SQL in the field of data science offered through Coursera

### Recognitions

2022/9	Jason Lang - 1,000 (Canadian dollar) Government of Alberta Prize / Award A scholarship given for maintaining a high average GPA throughout the previous school year
2022/5	Bronze Unit Guider Award (Canadian dollar) Girl Guides Prize / Award The Bronze Unit Guider Award is presented to Unit Guiders in recognition of good service in the Unit Guider role.

2021/10	Loblaw Scholarship (Canadian dollar) Loblaws Prize / Award A scholarship for team leadership in my workplace, when I was working for Superstore.
2021/9	Jason Lang - 1,000 (Canadian dollar) Government of Alberta Prize / Award A scholarship for maintaining a high GPA the previous year
2020/9	Jason Lang - 1,000 (Canadian dollar) Government of Alberta Prize / Award A scholarship for maintaining a high GPA throughout the previous school year
2020/9	The Jobber Leadership Award for Women in Computing Science - 2,000 (Canadian dollar) University of Alberta Prize / Award Awarded to students who identify as female with satisfactory academic standing enrolled in the second year of a Computing Science specialization in the Faculty of Science
2020/4	Spark Friendship Camp Team Award (Canadian dollar) Girl Guides Prize / Award An award for the successful running of a area camp for a large group of sparks
2019/10	Edmonton Area Girls Service Award (Canadian dollar) Girl Guides Prize / Award Presented to a registered girl member for service to Guiding. Additional criteria may include service outside of Guiding: church, community, school participation and family commitment
2019/10	Commonwealth Award (Canadian dollar) Girl Guides Prize / Award This award is about challenging yourself to find out more about the Commonwealth you are part of. Some of the challenges are quite open, giving you lots of choices to be creative. Your leader will be able to help you set goals for each challenge you choose to complete. Discuss with a leader how you'll know you've achieved your goals. Remember, each challenge you do should be a challenge to you.
2019/9 - 2023/4	First Class Standing (Canadian dollar) University of Alberta Distinction I held a GPA of higher than 3.5 for these four academic years
2019/9	The Diversity Entrance Scholarship in Computing Science - 2,000 (Canadian dollar) University of Alberta Prize / Award An entrance scholarship for computing science.
2019/9	Actuarial Foundation of Canada National Scholarship - 2,000 (Canadian dollar) Girl Guides Prize / Award For registered members of GGC who are studying actuarial sciences, mathematics, computer science or a related field at any post-secondary level.

2019/9	Rutherford Scholarship - 2,500 (Canadian dollar) Government of Alberta Prize / Award A scholarship for having high standing in high school
2019/9	The Alberta Council Scholarship - 1,500 (Canadian dollar) Girl Guides Prize / Award Alberta Council scholarships are available to any active member under the jurisdiction of Girl Guides of Canada, Alberta Council, who has not previously received this scholarship and will be attending an accredited Canadian post-secondary institution full-time for the fall term be it in person, virtually or a combination of both.

## User Profile

Researcher Status: Master's Student

Research Career Start Date: 2024/09/01

Engaged in Clinical Research?: No

Fields of Application: Communication and Information Technologies, Education

Areas of Research: Computer Science and Statistics

Research Specialization Keywords: Natural Language Processing

Research Disciplines: Computer Science

## Employment

2021/11	Lifeguard Community Services, City of Edmonton Part-time I supervise a pool, and maintain the water chemistry of the pool. I maintain good customer relations with customers at the pool. I participate in the cleaning and maintenance of the facility.
2025/5 - 2025/8	Pediatrics Summer Student University of Alberta Part-time, Consultation I am the advisor to a group within the pediatrics department on all of their summer projects that involve AI. I am their summer AI advisor.  Areas of Research: Automatic Language Processing Research Disciplines: Computer Science, Pediatrics
2025/5 - 2025/6	Work Integrated Learning Opportunity -- K - 12 AI Literacy Program Alberta Machine Intelligence Institute Part-time, Sessional Myself along with a group of other WILO participants visit local elementary schools and allow the children to gain AI literacy through a variety of stations teaching different concepts.  Fields of Application: Education Research Disciplines: Computer Science

- 2025/2 - 2025/2 Work Integrated Learning Opportunity -- Kickstart Presenter  
Alberta Machine Intelligence Institute  
Part-time, Sessional  
I created and presented a talk at the 2025 Kickstart Group that was run by AMII. I also moderated an online discussion group on LinkedIn and answered technical questions throughout the program.
- 2024/5 - 2024/9 Data Scientist  
BallParkHousing  
Part-time  
This is a start-up still in the beginning phase, I have helped create the MVP. I have a contract for permanent work after the initial success of the company
- 2024/2 - 2024/8 Perm Lifeguard  
Community Services, City of Edmonton  
Full-time  
I was a head lifeguard at City of Edmonton, I was responsible for training new guard and providing training sessions for existing guards.
- 2023/9 - 2023/12 Teaching Assistant  
Computing Science, University of Alberta, University of Alberta  
Part-time, Term  
Tenure Status: Non Tenure Track  
I am a teaching assistant to an intro level of computing science. I run lab seminars and grade students.
- 2023/5 - 2023/8 NSERC Grant Summer Student  
Computing Science, University of Alberta, University of Alberta  
Full-time, Term  
Tenure Status: Non Tenure Track  
I studied linguistic features of undergraduate student forum data from a western Canadian university. I used database languages along with statistical analysis to determine gender differences.  
  
Fields of Application: Communication and Information Technologies  
Areas of Research: Computer Databases, Gender Relationship  
Research Disciplines: Computer Science
- 2022/9 - 2022/12 Teaching Assistant  
Computing Science, University of Alberta, University of Alberta  
Part-time, Term  
Tenure Status: Non Tenure Track  
I was a teaching assistant for a computer games and puzzles class. I held regular office hours and assisted students.
- 2022/5 - 2022/8 NSERC Grant Summer Student  
Computing Science, University of Alberta, University of Alberta  
Full-time, Term  
Tenure Status: Non Tenure Track  
I worked with a team to solve the alternating linear clobber problem. Studied and created and used software to detect patterns in order to determine first player always wins.  
  
Areas of Research: Combinatorial  
Research Disciplines: Computer Science

2021/5 - 2022/8	<p>NSERC Student Research Student Computing Science, University of Alberta, University of Alberta Full-time, Term Tenure Status: Non Tenure Track Researched differences in performances based on security measure in processing chips for spectre and meltdown. Assisted with learning materials with professor. Wrote an unpublished manuscript.</p> <p>Areas of Research: Computer Architecture Research Disciplines: Computer Science</p>
2020/4 - 2022/1	<p>Liquor Store Clerk Liquor, Loblaws Part-time I worked as a cashier, stock person and any other job that was needed at the store. I played many roles. I was able to handle cash and deal with customer service issues. I got my proserve.</p>
2021/9 - 2021/12	<p>Teaching Assistant Computing Science, University of Alberta, University of Alberta Part-time, Term Tenure Status: Non Tenure Track I was a teaching assistant for an undergraduate low level programming course.</p>
2017/3 - 2021/11	<p>Aquatic Instructor Community Services, City of Edmonton Part-time I taught swimming lessons to all ages from infants up to adults. I taught lifesaving courses. I also participated in summer programs to ensure the safety and enjoyment of the patrons at pools.</p>

## Research Funding History

### Awarded [n=3]

2024/9 - 2025/8	<p>Walter H Johns Graduate Fellowship, Fellowship Project Description: My Thesis Work</p>		
2024/9 - 2025/8 Principal Applicant	<p>Canada Graduate Scholarship-Masters Program, Scholarship Clinical Research Project?: No Project Description: This is funding for my Master's thesis which was laid out in my application. I am looking to create a model that can predict which users on the social media platform Reddit will become incels. Research Disciplines: Computer Science</p> <p><b>Funding Sources:</b></p> <table> <tr> <td>2024/9 - 2025/8</td><td> <p>Natural Sciences and Engineering Research Council of Canada (NSERC) Total Funding - 27,000 (Canadian dollar) Funding Competitive?: Yes</p> </td></tr> </table>	2024/9 - 2025/8	<p>Natural Sciences and Engineering Research Council of Canada (NSERC) Total Funding - 27,000 (Canadian dollar) Funding Competitive?: Yes</p>
2024/9 - 2025/8	<p>Natural Sciences and Engineering Research Council of Canada (NSERC) Total Funding - 27,000 (Canadian dollar) Funding Competitive?: Yes</p>		
2024/12 - 2025/8	<p>Faculty of Science Academic Excellence Scholarship, Scholarship</p>		

### Completed [n=3]

2023/5 - 2023/8 Principal Applicant	<p>NSERC USRA, Grant, Operating Clinical Research Project?: No</p>
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Project Description: I worked with undergraduate student forum data in computing science to analyze the difference in linguistic characteristics based on gender.

**Funding Sources:**

2023/5 - 2023/8      Natural Sciences and Engineering Research Council of Canada (NSERC)  
 Total Funding - 6,000 (Canadian dollar)  
 Portion of Funding Received - 6,000 (Canadian dollar)  
 Funding Renewable?: No  
 Funding Competitive?: Yes

2022/5 - 2022/8  
 Principal Applicant

NSERC USRA, Grant, Operating  
 Clinical Research Project?: No  
 Project Description: I worked with a professor in study combinatorial game theory to study the first lemma around the theoretical mathematical game clobber

**Funding Sources:**

2022/5 - 2022/8      Natural Sciences and Engineering Research Council of Canada (NSERC)  
 Total Funding - 6,000 (Canadian dollar)  
 Portion of Funding Received - 6,000 (Canadian dollar)  
 Funding Renewable?: No  
 Funding Competitive?: Yes

2021/5 - 2021/8  
 Principal Applicant

NSERC URSA, Grant, Operating  
 Clinical Research Project?: No  
 Project Description: I work with a professor to develop course material along with a project on low-level processing studying Spectre and Meltdown speeds.

**Funding Sources:**

2021/5 - 2021/8      Natural Sciences and Engineering Research Council of Canada (NSERC)  
 Total Funding - 6,000 (Canadian dollar)  
 Portion of Funding Received - 6,000 (Canadian dollar)  
 Funding Competitive?: Yes

[n=]

2024/9 - 2025/8

University of Alberta Graduate Recruitment Scholarship, Scholarship  
 Project Description: My Thesis Research Work

**Funding Sources:**

2024/9 - 2025/8      University of Alberta  
 Total Funding - 5,000 (Canadian dollar)  
 Portion of Funding Received - 5,000 (Canadian dollar)  
 Funding Renewable?: No  
 Funding Competitive?: Yes

## Program Development

2021/9 TA, University of Alberta  
 Program Title: CMPUT 229  
 Course Level: Undergraduate  
 Program Description: Number representation, computer architecture and organization, instruction-set architecture, assembly-level programming, procedures, stack frames, memory access through pointers, exception handling, computer arithmetic, floating-point representation, datapath, control logic, pipelining, memory hierarchy, virtual memory.  
 Unique / innovative characteristics: I created an entire lab for the students to complete in the course, along with the complex solution, I created a website that explains the assignment.

## Event Participation

2023/1 - 2023/4 Participant, Computer Science Research Mentorship Program (CSRMP), Association, 2023/1 - 2023/4  
 CSRMP matches students from historically marginalized groups with peers and a Google mentor to support their pursuit of computing research pathways

## Community and Volunteer Activities

2018/9 Sparks Leader, Girl Guides  
 I plan and lead weekly meetings with groups of girls aged 5 and 6 to teach leadership, science, and gender empowerment among other skills. I am responsible for this group and work with them throughout the year along with my team of other leaders.

2020/5 - 2022/7 Vice President of Finance, Undergraduate Association of Computing Science  
 I was officially responsible for managing the finances of the association, I also helped write a weekly newsletter that was sent out to a large population of students in computing science and took weekly meeting minutes as well as organizing a hoodie sale.

2020/8 - 2021/1 Hackathon Logistical Coordinator, Hacked  
 I was responsible for the logistics of organizing an online hackathon. I gathered information about the students and I shipped out packages to hundreds of students and put them together.

2020/2 - 2020/2 WISEST Leader, WISEST  
 I volunteered at a two day conference as a leader for a robotics activity that was aimed at elementary aged girls interested in STEM.

2019/9 - 2020/2 Vice Chair of SOCHUM Committee, HSMUN  
 I met weekly to determine the direction, organization and content for the social cultural and humanitarian committee. I wrote scenarios and ran the several day long conference with the high school students.

2019/9 - 2020/1 Spark Camp Leader, Girl Guides  
 I along with a team planned a weekend long space themed camp that took place in January 2020. I planned activities for the 60 young girls that attended the camp. I was the responsible first aider and took care of many children.



2015/9 - 2019/12 Volunteer Pianist, Steinhauer Elementary  
I volunteered at the elementary school of Steinhauer as a volunteer pianist for the choir, I participated in Festival of Trees event and performed at city hall. I practiced and performed on multiple dates through the winter and finally over several performances at their winter music concert.

## International Collaboration Activities

2019/7 - 2019/8 Delegate of Canada, Netherlands  
I participated in an international Jamboree as a delegate of Canada from Girl Guides.

## Committee Memberships

2018/11 - 2021/11 Committee Member, Risk Oversight, Girl Guides  
To identify and mitigate exposure to risks that threaten the National Council's ability to accomplish the Mission of GGC in accordance with the risk management practices of GGC's Risk Management Strategy.

2017/8 - 2019/8 Committee Member, National Youth Council, Girl Guides  
The National Youth Council provides input and insights to Girl Guides of Canada's Board of Directors on the issues impacting girls' lives. Through consultation with other girls and youth, the council dives into what matters to girls and ensures that girls' voices and perspectives are front and centre in decisions shaping the future of Guiding. The National Youth Council consists of 9-12 Rangers from across Canada. The 2023-2024 National Youth Council is made up of members from the following provinces and territories: British Columbia, Alberta, Ontario, Quebec, Nunavut, Nova Scotia and Newfoundland and Labrador.

## Presentations

1. (2025). Using AI to Tackle Online Misogyny. Upper Bound - AI Research Pitch Competition, Edmonton, Canada  
Main Audience: General Public  
Invited?: Yes, Keynote?: No, Competitive?: Yes  
Description / Contribution Value: I presented my research at the AI pitch competition representing the Alberta Machine Intelligence Institute
2. (2025). AI and Mental Health. AI4Good, Edmonton, Canada  
Main Audience: General Public  
Invited?: Yes, Keynote?: No, Competitive?: No  
Description / Contribution Value: I gave a presentation to all the participants of the AI4Good Event both in Edmonton and virtually to those who are in Mila.
3. (2025). Modeling Incel Language Shift on Reddit. Responsible AI Conference, Calgary, Canada  
Main Audience: Researcher  
Invited?: Yes, Keynote?: No, Competitive?: No  
Description / Contribution Value: I gave a poster presentation at the Responsible AI Conference
4. (2025). Using AI to Tackle Online Misogyny. Responsible AI Conference, Calgary, Canada  
Main Audience: Researcher  
Invited?: Yes, Keynote?: No, Competitive?: No  
Description / Contribution Value: I gave a talk at the 3 minute Thesis Presentation at the Responsible AI Conference

5. (2024). Characteristics of communication in undergraduate student forum posts in computing science. FURCA (Festival of Undergraduate Research and Creative Activities), Edmonton, Canada  
Main Audience: General Public  
Invited?: No, Keynote?: No, Competitive?: Yes  
Description / Contribution Value: I gave a presentation about my work to a general audience to inform them of the gendered communication differences online in a more formal university setting

## Text Interviews

- |            |                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2020/11/03 | Customer Service, Flip<br><a href="https://mtcad.sharepoint.com/sites/lclFlip/en-ca/features/Pages/All_Company-Stores-FrontLine/2020-11">https://mtcad.sharepoint.com/sites/lclFlip/en-ca/features/Pages/All_Company-Stores-FrontLine/2020-11</a><br>Description / Contribution Value: I was interviewed about my customer service skills during the pandemic                       |
| 2019/05/28 | Gender Equality and the Pay Gap, Kyle Edwards, Macleans Magazine<br><a href="https://macleans.ca/society/why-are-we-paying-girls-less-than-boys-for-summer-work/">https://macleans.ca/society/why-are-we-paying-girls-less-than-boys-for-summer-work/</a><br>Description / Contribution Value: I was interviewed to discuss my experience with the pay gap as a teenager in Canada. |

## Publications

### Newspaper Articles

1. First Listed Author. Emily Vandermeer. (2019). Kenney's pay gap unfairly targets teens. Edmonton Journal. March 21 2019(Letters to Editor)  
Edmonton, Canada  
Number of Contributors: 1  
Editors: Edmonton Journal  
Contribution Percentage: 91-100  
Description of Contribution Role: I wrote the editorial  
Description / Contribution Value: I wrote an editorial that was published in the paper
2. First Listed Author. Emily Vandermeer. (2018). Uninformed column on climate change. Edmonton Journal. November 24 2018(Letters to Editor)  
Edmonton, Canada  
Number of Contributors: 1  
Editors: Edmonton Journal  
Contribution Percentage: 91-100  
Description of Contribution Role: I wrote a letter to the editor  
Description / Contribution Value: I wrote a letter to the editor

### Newsletter Articles

1. First Listed Author. Emily Vandermeer. (2019). Representing Girls' Voice. Canadian Guider. (Fall): 37. , Canada  
Number of Contributors: 1  
Contribution Percentage: 91-100  
Description of Contribution Role: I wrote the article that was edited  
Description / Contribution Value: I wrote this article for the newsletter.

## Working Papers

1. First Listed Author. (Emily Vandermeer, Carrie Demmans Epp, Alaa Alamay). (2024). Gendered communication: An analysis of undergraduate student forums in computer science. : 28.  
 Number of Contributors: 3  
 Contribution Percentage: 61-70  
 Description of Contribution Role: I did all of the primary research involved for this work. I did all of the analysis of the results and created the project to begin with.  
 Description / Contribution Value: This sets out to explore the way that different genders communicate online in a formal university setting to understand what that communication looks like and what that means for students of different genders.  
 Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC)
2. Co-Author. (Xinyue Chen, Taylor Folkersen, Kamillah Hasham, Ryan B. Hayward, Owen Randall, Luke Schultz, Emily Vandermeer). (2023). Alternating Linear Clobber. : 11.  
 Number of Contributors: 7  
 Contribution Percentage: 11-20  
 Description of Contribution Role: I helped the others over the summer of 2022 work through different strategies of proof  
 Description / Contribution Value: Finally solved the question of if player 1 can always win in a linear alternating clobber game.

## Online Resources

1. Co-Author. Kianna Benson, Emily Vandermeer. Why we should all be ready, willing and able to let youth lead. (2018).  
 Contribution Percentage: 41-50  
 Description / Contribution Value: I answered questions along side another author to discuss the questions surrounding youth leadership