

# Rachel H. Ralph

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## Skills

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<b>AI and Big Data</b>	Experienced with Pandas, NumPy, PyTorch, and Tensorflow
<b>Programming languages</b>	Proficient in Python, Java, C, C++

## Education

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<b>Bachelors degree in Computer Science</b>	<i>University of Calgary</i>
<i>Honours Bachelor's degree program</i>	<i>September 2019 - April 2024</i>
<i>GPA: 3.8/4.0</i>	
<i>Took courses in AI techniques, operating systems and embedded programming, and data structures.</i>	
<i>Learned practical skills such as using IDEs and GitHub.</i>	

## Work experience

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<b>Teaching Assistant</b>	<i>January 2022 - Present</i>
<i>University of Calgary</i>	<i>Calgary, Alberta</i>
<ul style="list-style-type: none"><li>• Lead a twice-weekly tutorial section of twenty five students where I taught practical skills needed for courses including C++, STL containers, multithreaded applications, embedded systems.</li><li>• Other duties include marking students work, answering questions and providing one-on-one support.</li></ul>	
<b>Research Assistant</b>	<i>May 2022 - August 2022</i>
<i>University of Calgary</i>	<i>Calgary, Alberta</i>
<ul style="list-style-type: none"><li>• Utilized skills in assembly and reverse engineering to analyze Atari 2600 games using reinforcement learning to gain a deeper understanding of historical programming techniques.</li></ul>	
<b>Summer Camp Leader</b>	<i>June 2018 - August 2019</i>
<i>Minds in Motion Summer Camps</i>	<i>Calgary, Alberta</i>
<ul style="list-style-type: none"><li>• Taught elementary and junior high girls skills in programming, video game development, and web design.</li></ul>	

## Programming Experience

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<b>AI Researcher</b>	<i>July - August 2021</i>
<i>University of Washington</i>	<i>Seattle, Washington</i>
<ul style="list-style-type: none"><li>• Worked with Partners in Health and a local Seattle non-profit, Medic Mobile to help create reliable routing and triage systems for door-to-door healthcare workers.</li><li>• Utilized classical AI techniques and machine learning techniques to create these applications.</li></ul>	
<b>Research Fellow</b>	<i>May - June 2021</i>
<i>AI4Good Labs</i>	<i>Edmonton, Alberta</i>
<ul style="list-style-type: none"><li>• Attended a four-week long intensive course on supervised, unsupervised, and reinforcement learning.</li><li>• Programmed a computer vision algorithm that would detect waste in photos to create a comprehensive map of where litter was to help facilitate community clean ups.</li></ul>	

## Awards

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**Lockhart Computer Science Award**  
**Dean's List**

For outstanding research and academic performance  
For high academic performance