■ laurasalasa96@gmail.com | 🗖 laura-e-salas | 🎓 Graduating May 2023 | 🏴 Canadian Citizen

Education

B.Sc. Computer Science | University of Montreal

Sep. 2019-May 2023

2020 University of Montreal Scholarship Recipient | 2019 Ada Lovelace Scholarship Recipient

Experience

Meta Platforms Inc. Fremont, California

Software Engineer Intern - Full-stack development

May 2022 - Aug. 2022

- Developed an extendable back-end API in Hack (PHP) that parsed CMS syntax for creating email components, for use by over 20+ product teams
- Used different software design patterns to prioritize easy developer integration, which in turn reduced email onboarding development time and saved the company hundreds of engineering hours
- Utilized **XHP** and **CSS** to create render logic for said email UI components, ensuring Product Designers' specs were followed and that rendering worked over different email clients.
- Went beyond internship scope by initiating discussions with Designers and contributing multiple components to our design library
- Received exceptional feedback from managers, peers, and teammates for engineering quality, leadership, and communication skills.

Fremont, California

Software Engineer Intern - Full-stack development

May 2021 - Aug 2021

- Developed React JS components to optimize front-end interactivity and enhance user productivity
- Utilized Hack (PHP) to write the back-end of said components, ensuring they complemented existing ones
- Implemented GraphQL mutations to manage calls between front-end and back-end, and designed SQL database entities to persist and update
 data
- Integrated a third-party REST API to personalize query results for users and ensured secure data transmission through OAuth authentication
- Presented internship project to large audiences, receiving exceptional feedback from organization VPs

Collineo Inc.

Montreal, Quebec

Software Engineer Intern - C++ Desktop Development

Jul. 2020 - May 2021

- Developed high-performance C++ 15/QT5 software components for desktop applications that helped interactively visualize and analyze data extracted from robotic inspection systems.
- Worked on modernising part of the codebase (in **C** and **C++**) that handled **low-level communication** with robots. Successfully improved performance and set groundwork to make it compatible with new analysis tools, enabling the company to take on a new client.

Applied Research in Linguistics Informatics Lab @ UMontreal | Summer Research Intern

Montreal, Quebec

• Leveraged **Python's natural language processing (NLP) libraries (spaCy, NLTK)** to automatically answer Stanford's 100,000 question-and-answer couplets (SQUAD). Learned **principles of NLP and ML** under supervision of Dr. P. Langlais.

Jun. 2019 - Jul. 2019

Theoretical and Quantum Computing Lab @ UMontreal | Summer Research Intern

Montreal, Quebec

• Built a **real-life demonstration of the BB84 quantum cryptography protocol** with the help of laser beams, polarizing systems and beam splitter. **3D modelling** was used to create and print custom-made mounts.

Jul. 2019 - Aug. 2019

Projects + Extracurricular

Applied Research in Linguistics Informatics Lab @ UMontreal | Research Project

Jan-May 2022

NLP undergraduate research project under suprevision of Dr. P. Langlais. Determined possible differences in context of word's female vs male usage, by vectorizing and analyzing a corpus of 100 years of French Newspapers

Project link

UMontreal's Women in CS | Co-Founder & Spokeswoman

May 2020-Present

Took initiative to **co-found and lead University in Montreal's Women in CS group**, ensuring a lasting impact on our university. We now have 100+ members and have organized multiple successful events!

Group page

Honours + Awards _____

2022	2nd Place Overall McGill Women in CS 2022 Hackathon - For our wardrobe app powered by graph algos.	Montreal, Quebec
2019	Ada-Lovelace Scholarship "Given to one female student per year with academic excellence and who	Montreal, Quebec
	shows great interest and involvement in the fields of Computer Science and Mathematics"	
2019	2nd Place Best (college level) Thesis Presentation - Thesis about Greenhouse Optimization	Montreal, Quebec
2015-19	Other Prizes: Canadian Robotics Competition (CRC) (2nd place team prize) (2019) • AURA Prize for	Montreal, Quebec
	Student Engagement (2015) • Desautels (McGill) Preparatory Case Competition (1st place) (2015)	