

AUDREY MORIN

Software Developer, Mathematician and Educator

@ audrey.morin.3@gmail.com
github.com/msdrey

(425) 614-9850
audreymorin.me

Redmond, WA

in linkedin.com/in/audreymorin3

PROJECTS

Personal Project

Sewing Pattern Maker

2020-2021

Seattle, WA

- Developed a web app that allows users to generate a printable pdf sewing pattern from a picture.
- The user traces the outline of an uploaded picture of a garment with our **drawing tools**. Our algorithms **separate the pattern pieces** and **add sewing allowances**, then **scale and output** the result to a downloadable pdf.
- Techs** React, Typescript, HTML Canvas, GitHub

TechTogether Hackathon

SafeWalk Boston

March 2019

Boston, MA

- Invented an algorithm that computes the safest walking route between two locations according to crime statistics.
- After users input an origin and destination, our web app uses the **Google Maps API** to generate various walking routes. Our algorithm then **evaluates their safety levels** by taking into account the **crime statistics** in Boston.
- Techs** Python, Google Maps API, HTML, jQuery, GitHub
- Awards**
 - Best Use of Open Source Data For Social Good
 - Climate Change Environmental Sustainability Challenge

Class project

Wordasaurus

Spring 2020

Seattle, WA

- Went above and beyond on a **client/server** assignment and delivered a **multi-user** word-guessing game hosted on a Google Cloud VM.
- Features password protected **user accounts**, user high scores, a public **leaderboard** and the possibility for users to contribute to our bank of clues
- Techs** C++, TCP/IP, multi-threading, Google Cloud VM, GitHub

RECENT EXPERIENCES

Data Analyst

MAQ Software

Since February 2021

Redmond, WA

- Query data using SQL and KQL and interpret the data using Power BI
- Participate in technical meetings and periodical reviews of implementation
- Participate in technical trainings and complete relevant industry courses in Power BI, SQL, Azure Computing Services and KQL

Mathematics Instructor

Marianopolis College, Cegep St-Jean-sur-Richelieu & Maisonneuve

2015 - 2018

Montreal, Canada

- Instructed college level mathematics to 13 groups of ≈ 30 students over the course of 7 semesters.
- Produced guided lecture notes, exams, quizzes and assignments

PROGRAMMING

- Java
- C++
- Typescript
- Python

EDUCATION

Fundamentals of Computer Science Graduate Certificate

Seattle University

2019 - 2020

4.0/4.0 GPA

- OO Concepts, Data Structures and Algorithms, Databases, Operating Systems, Software Engineering

B.Sc. and M.Sc. in Mathematics

University of Montreal

2009 - 2017

Master's 4.0/4.0 GPA (Quebec 4.2/4.3)

- Master's Thesis: Morse complexes and their equivalencies (in French)
- \$17,500 CRSNG Research Grant
- \$15,000 FRQNT Research Grant

Bachelor's 3.95/4.0 GPA (Quebec 4.1/4.3)

- Linear Algebra, Algebra, Analysis, Differential Geometry, Topology, Probability, Statistics
- 2x \$5,625 CRSNG Summer Research Grant

Minors Cognitive Sciences & Digital Music

- \$5,625 CRSNG Summer Research Grant

TECHNICAL SKILLS

Git HTML CSS React
MS Azure SQL KQL Research
LaTeX MATLAB

SOFT SKILLS

Leadership, Teaching

Critical and logical thinking

Organizational skills

Languages
French (Native), English (Fluent)