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

Seattle, WA

- Worked in a team to develop 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 integrated drawing tools. Our algorithms will determine the pattern pieces and add sewing allowances where necessary, then scale and print the result to a downloadable pdf.
- Techs React, Typescript, HTML Canvas, GitHub

TechTogether Hackathon

SafeWalk Boston

Soston, 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

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

Mathematics Instructor

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

2015 - 2018

Montreal, Canada

- Instructed college level mathematics to 13 groups of $\approx\!\!30$ students over the course of 7 semesters.
- Produced sets of guided lecture notes for Linear Algebra and Calculus I
- Designed and graded exams, weekly quizzes and assignments

Teaching Assistant & Lab Assistant

University of Montreal

2011 - 2014

- Montreal, Canada
- Conducted exercise sessions for Linear Algebra, Calculus & Psychoacoustics to 4 groups of \approx 40 undergraduate students over 4 semesters
- Designed experiments, recorded and audio engineered audio stimuli, collected and analyzed data on the phonetic analogies of guitar timbre
- Recruiting and data collection at the BRAin, Music and Sound laboratory

PROGRAMMING

Java

Python

• C++

Typescript

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

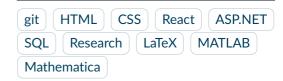
Bachelor's 3.95/4.0 GPA (Quebec 4.1/4.3)

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

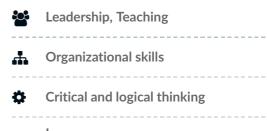
Minors Cognitive Sciences & Digital Music

• \$5,625 CRSNG Summer Research Grant

TECHNICAL SKILLS



SOFT SKILLS



Languages
French (Native), English