# Nadim Mottu

J +1 647-594-9446 — ■ nadimmottu@gmail.com — mwww.linkedin.com/in/nadim-mottu — nadim-mottu — nadim-mottu

## **Skills**

Languages: Java, Python, C, MIPS, GML, Lua Libraries: Java Swing, Numpy, SciPy, scikit-learn, JavaFX

Web Dev: JavaScript, HTML, CSS, React, Next.js OS: Debian, Ubuntu, Windows

Databases: PostgreSQL, Prisma, SQLite Tools: Docker, NextCloud, Latex, excel, GIMP, Adobe Pho-

toshop, Adobe Premiere

#### Education

# **&** University of Toronto

September 2022 - May 2026

Bachelor of Science CGPA:3.73/4.00

Computer Science Specialist with a Focus in Theory of Computation, Minor in Mathematics

• Courses Taken: Computer Organization, Software Tools and Systems Programming, Enriched Data Structures, Software Design, Enriched Theory of Computation, Analysis I&II, Algebra I&II, Probability and Statistics I, Topology

• Courses in Progress: Machine Learning, Artificial Intelligence, Programming on the Web, Databases, Graph Theory

• University Of Toronto International Scholar Award - Faculty of Arts and Science (2022–2026)// Dean's List Scholar in the Faculty of Arts & Science (2023–2024)// Innis College Exceptional Achievement Award (2023–2024)

## **WIS Washington International School**

2014 - 2022

IB - Bilingual Diploma

IB: 41/45 - GPA: 7.00/7.00

• Higher level: Mathematics: Analysis and Approaches, Physics, Economics,

• Representative for student government (ISU) // Founder of Coding && Computing Club

# **Relevant Experience**

**(b)** Internal Drive Tech

June – August 2024

Summer Instructor

Amazon HQ/American University — Washington, DC

• Taught 7 one-week classes to elementary school children in coding skills through games like scratch and Lua

- Helped over 50 students develop projects making sure to highlight important software engineering practices such as testing, debugging, reviewing one another's work. Explained technical concepts such as boolean algebra.
- Collaborated with other instructors to develop curricula and filled in when needed.

#### **Toronto Climate Observatory**

May - June 2024

Research Assistant

*University of Toronto — Toronto, ON* 

- Developed with another student a model using CMIP6 to predict changes in temperature in Toronto and how that might impact skating rink closures as a part of a research team. Documented and explored "the usability gap" and how to make climate data more usable to people with only a basic understanding of climate science.
- Used data analysis libraries for Python such as NumPy and Matplotlib, along with techniques such as linear regression.

## **Highlighted Projects**

Scriptorium

September 2024 – Present

- Develop with a team a website in React and tailwindCSS allowing users to develop and share their code.
- Provides isolation to all projects using Docker in backend, and allows users to run one another's code in a safe environment.
- Allows for user account creation authentication, rating, posts, and reporting. Follows REST best practices.

#### **D&D Digital DM screen App**

April 2024 - Present

https://github.com/nadim-mott/DnD-Screen

- Developed a digital DM screen for Dungeons and Dragons in JavaFX. Follows the MVC design pattern.
- Uses databases to store information on monsters and spells. Stores data with optimal use of custom data structures.
- Makes use of the Open5e API to provide information on spells and monsters. Provides dice roller, and initiative tracker.

#### **Tetris in Assembly**

January 2024 - April 2024

https://github.com/nadim-mott/tetris\_assembly

- Developed a Tetris game in MIPS assembly language. Used the SATURN simulator to run the code.
- Made use of low level programming techniques to develop the game. Used bit map to display the game and UI.
- Collaborated with a partner. Wrote the game logic, graphics, and reviewed code written by my partner.

#### Caesar Productivity App

September 2023 – December 2023

https://github.com/nadim-mott/Caesar

- Developed a task and event management application in Java, adhering to Clean Architecture and SOLID principles.
- Built the app from scratch as part of a team of three. Conducted code reviews for other contributors' use-cases.