

# MONTÉ MAHLUM

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Minneapolis, MN

[LinkedIn](#)  
[Writing & Website](#)  
[GitHub Repository](#)

Driven and highly curious researcher seeking employment in blockchain, formal verification, machine learning, or technical writing thereof. Passionate about finding and expounding creative solutions to hard problems using higher mathematics.

## EDUCATION

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**University of Minnesota** MSc in Mathematics, GPA 3.91 2024 – 2026  
**McGill University** BSc in Mathematics and Physics, GPA: 3.45 2020 – 2024  
**Univerzita Karlova** Semester Abroad, Local GPA: “Excellent” 2023  
**Relevant Coursework** (14+ at honours level)  
Algebra, Algebraic Topology & Geometry, Algorithms, Category Theory, Differential Geometry, Functional Analysis, Mathematical Logic, Probability, Statistics, Stochastic Processes, Quantum Physics & Computing.

## PROFESSIONAL EXPERIENCE

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**Mathematics Research Assistant**, University of Minnesota, Twin Cities July 2023 – Present

- Working to ensure convergence of a novel deep learning algorithm developed in [LWL].
- Developed excellent research and writing skills through synthesis and organization of complex ideas. Proved many nontrivial and novel results.
- Paper is unpublished, but available upon request. For reference, please contact Professor Li Wang (liwang@umn.edu).

**Mathematics Teaching Assistant**, University of Minnesota, Twin Cities Aug 2024 – Dec 2024

- Held twice-weekly discussion sessions and office hours on Calculus.
- Strengthened exposition and explanation skills by teaching (and adapting) abstract concepts and rigorous problem solving techniques to students unaccustomed to such modes of thought. (†)

**AI Data Trainer**, DataAnnotation May 2024 – Aug 2024

- Analyzed, annotated and wrote reviews of code written by various AI models.
- Broadened writing, coding, and critical thinking skills.

**Calculus I, Probability, and Linear Algebra Tutor**, Freelance<sup>†</sup> Nov 2023 – April 2024  
**Calculus Tutor**, JASS Montreal<sup>†</sup> Sep 2022 – Dec 2022

## PROJECTS

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**Directed Reading Program (Mentor)** Sep 2024 – Dec 2024  
Mentored one student through their reading of [B&D]. Example of such work can be found [here](#).

**Manifold Institute** June 2024 – July 2024  
Founded summer program teaching middle school students advanced mathematics and physics. Wrote lesson plans and all [website](#) content. Program did not come to fruition in 2024, but hopefully in the coming year.

**Directed Reading Program (Mentee)** Jan 2024 – August 2024  
Mentorship with [Alexis Leroux-Lapierre](#) on categorification following [Savage].

**Fibrations Podcast** Sep 2022 – Dec 2023  
Creator and host. Explored academic research at McGill University. Listen on [Spotify](#).

**25-Hour McGill Physics Hackathon** Oct 2022  
Analysis of algorithms (one of which novel) for the Laplace Equation. Submission can be viewed [here](#).

## SKILLS AND LANGUAGES

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English (Native), Spanish, Python (see [Repository](#)), Java, JSON, Latex, Jiu Jitsu, drums, piano.