

# Ethan Denny

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## Education

### Memorial University of Newfoundland

Sep 2021 – Present

*B.Sc. in Computer Science (Honours) 3.96 GPA*

**Coursework:** Visual Computing & Applications, Algorithmic Techniques for AI, Theory of Computation

**Activities:** Computer Science Society, Eastern Edge (underwater ROV team), MUN Students' Union

## Experience

### Memorial University

May 2024 – Aug 2024

*Research Assistant*

- Built a matrix multiplication library in **Rust** that uses finite fields
- Emphasis on speed and security; work was intended for use in future cryptography research

### Avalon Holographics

Jan 2024 – Aug 2024

*Software Co-op Student*

- Worked with a team to iterate quickly on **C++** applications for best-of-class holographic displays
- Built out complete features involving web APIs, shaders, and custom data formats

### MUN Visual & Analytic Computing Lab

Sep 2023 – Dec 2023

*Software Developer (Student)*

- Worked on a lightfield simulator written in **C++**
- Developed a new method of storing and reading lightfield simulator states
- Refactored critical code, making development easier going forward

### MUN Visual & Analytic Computing Lab

Jun 2023

*Machine Learning Developer (Student)*

- Learned the basics of building machine learning models using **Python**
- Worked with a team to build custom workflows and documentation for the tracking software MLflow
- Directly supported research focused on early detection of breast cancer

### Genoa Design

Jul 2021 – Aug 2021

*High School Intern*

- Developed a virtual training game with **Lua** and Tabletop Simulator, which Genoa intended to implement as part of their employee onboarding process
- Used **Python** to build a proof-of-concept for using graphs to visualize connections between ship compartments

## Projects

### Connect2

- Built a mock social media app for a hackathon using **React**, that envisioned a new way of interacting with a feed
- Led a team of six to winning an award for Best Design

### "Lossless Compression Techniques for Grayscale Images"

- Created with a team as part of Memorial University's course COMP 3301: Visual Computing and Applications, using **Python** and **C**
- Purpose was to generate data for comparisons of different lossless compression algorithms in terms of space savings and run time

## Awards

D.O. IT Hackathon; Best Design

May 2024

techNL Making Waves Innovator Scholarship

Jan 2024

Dean's List for the MUN Faculty of Science

2021-2022, 2022-2023