Ethan Denny



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



D.O. IT Hackathon; Best Design techNL Making Waves Innovator Scholarship Dean's List for the MUN Faculty of Science

May 2024

Jan 2024

2021-2022, 2022-2023, 2023-2024