

Ethan Miller

(518) 414 4362 | 16 Sheffield Drive, Clifton Park NY | millertethan@proton.me

OBJECTIVE

Senior Computer Systems Engineering student at RPI seeking an internship for spring/summer 2026 to expand my knowledge in computer graphics, rendering, and related fields in technical art and gain professional experience.

EDUCATION

Rensselaer Polytechnic Institute - Troy, NY

December 2026

Bachelor of Science in Computer Systems Engineering

University of New Hampshire - Durham, NH

2021-2024 (Transferred)

Bachelor of Science in Computer Engineering

GPA: 3.07

COURSEWORK

- Designing with Programmable Logic
- Electric Circuits
- Computer Organization
- Data Structures and Algorithms
- Digital Systems
- Computer Vision

SKILLS

Programming Languages: C++, Java, Verilog, HTML, CSS

Software: MATLAB, Autodesk Inventor, Autodesk Fusion 360, Siemens Nx, Blender, Microsoft Office Suite

PROJECTS

Ice Detecting and Salt Dispensing Robot - IED, RPI

February 2025 - May 2025

Oversaw circuit design, programming, and integration of electronic components for an autonomous robot that detects and treats black ice with a group of six.

Color Filters - Linear Algebra, UNH

April 2023 - May 2023

Collaborated with a partner on a MATLAB program to use matrix operations to edit color channels of images.

Simulated Padlock - Computer Organization, UNH

April 2023 - May 2023

Programmed a simulation of an electronic padlock design in Verilog based on a state machine, demonstrated using a Xilinx Basys 3 board.

EXPLORATION

Raycasting Engine - C, OpenGL

Followed a step by step tutorial to build a DOOM-style raycasting engine using C and OpenGL to get exposure to real time rendering and OpenGL fundamentals.

Mechanical Keyboard Firmware - C, QMK

Used QMK C libraries to program and flash tap-hold, mod-tap, and layer toggle functionality to an existing mechanical keyboard.

LEADERSHIP

Pai's Tae Kwon Do

November 2013 - March 2020

Leadership Team Member

- Accompanied 40+ peers in monthly leadership and self-discipline training sessions.
- Assisted instructors in teaching lower belt rank classes twice a week and ensuring younger children behave themselves.