Shamus Murphy

Shamus.Murphy@uvm.edu | LinkedIn | GitHub

Red Bank, NJ

Education

University of Vermont — B.S. in Mathematics
Minor in Computer Science
Expected Graduation: May 2027
Relevant Coursework: Data Structures & Algorithms, Computability & Complexity, Data Privacy, Differential Equations

Skills

- **Languages:** Python, R, C++, Java, MySQL

- **Concepts:** Algorithms & Complexity, Computability Theory, Data Privacy, Numerical Methods / Applied Math, Machine Learning Foundations

- **Tools/Frameworks:** Git, GitHub, Linux/CLI, Flask, React, OpenGL, Unreal Engine, MySQL

Projects

Shape Sprint (2025)

- Developed a rhythm-based game inspired by Geometry Dash using C++ and OpenGL.

- Implemented collision detection and gravity physics to enhance gameplay.

- Designed a user-friendly interface with smooth rendering and graphics.

RC Car Controller (2024)

- Built an RC car using Arduino and Raspberry Pi with integrated camera and motor controls.

- Created a Flask-based web interface for remote driving and live video streaming.

- Collaborated in a team of three for a Computer Organization final project.

Top Ski Mountains in Vermont Website (2023)

- Developed a responsive website highlighting Vermont's top three ski resorts.

- Integrated OpenWeatherMap API to display real-time weather data.

- Built a MySQL database for email storage and automated recommendations.

Work Experience

Bar Back — Rooney's Oceanfront Restaurant, Long Branch, NJ   Summer 2024–2025

- Worked efficiently under pressure in a 300+ seat restaurant, strengthening multitasking and communication skills.

Property Maintenance — Navesink Property Services, Shrewsbury, NJ   2021–2025

- Independently managed pool service routes, building problem-solving and client relationship skills.

Gourmet Associate — Sickles Market, Little Silver, NJ   2021–2023

- Assisted with deliveries, invoices, and customer service across departments.