

Shraddha Singh

Halifax, NS | 902-225-8157 | sh913738@dal.ca
[linkedin.com/in/shraddhasinggh/](https://www.linkedin.com/in/shraddhasinggh/) | github.com/shrad059 | shradd059.github.io/portfolio/

EDUCATION

Dalhousie University

Halifax, NS

Bachelor of Science in Computer Science and Physics

September 2021- May 2025

- Relevant Coursework: Data Structures and Algorithms, Database Systems, Software Development, Web Design and Development, Computer Systems

EXPERIENCE

Undergraduate Teaching Assistant

January 2023 – Present

Dalhousie University

Halifax, NS

- TA for CSCI 1120 (Introduction to Computer Systems) and taught basic concepts of computer systems like data and program representation, program translation, and operating systems.
- Held office hours for over 70 students, providing one-on-one support and assistance with course material.
- Key responsibilities includes providing individualized support, creating and managing lesson plans for lab sessions, and evaluating students' understanding of the material.

Embedded Design Software Developer

October 2022 – Present

Dalhousie Solar Car

Halifax, NS

- Contributed to the development and maintenance of software for the solar car team by utilizing Python and C programming languages.
- Developed and maintained technical documentation for the software and systems.
- Utilized version control software such as Git to manage and maintain the codebase.

PROJECTS

Chat Room WebApp | *Redux, React, MongoDB, NodeJS, Express, socket.io*

January 2023

- Developed a real-time chat room web application using Express and MongoDB database with React as the frontend.
- Utilized socket.io to establish a real-time connection between the user and server for instant messaging.
- Implemented features such as user registration and secure login system, user authentication and authorization, real-time messaging, and online/offline presence indicators.

Ecommerce Website | *Redux, React, MongoDB, NodeJS, Express, Stripe*

December 2022

- Developed a full-featured e-commerce website using the MERN stack with Redux for state management for the shopping cart.
- Integrated a search and filtering system to filter through products and help customers find products easily.
- Utilized Stripe API for handling payment transactions.
- Incorporated a shopping cart and order management system for customers to manage their orders.

PathFinding Visualizer | *Python, PyGame, Git*

December 2022

- Developed and implemented the A* algorithm to find the optimal path between two points on a grid.
- Created a user-friendly graphical interface using Pygame library to demonstrate the pathfinding process.
- Allowed users to interact with the visualizer by allowing them to set the starting and ending points.
- Incorporated obstacles, such as walls, to show the effect on the pathfinding process.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, MongoDB, JavaScript, HTML/CSS

Frameworks: Django, React, Node.js, JUnit, WordPress, Material-UI, Styled-Components

Tools: Git, Docker, AWS, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, Matplotlib, Express.JS

CERTIFICATES AND AWARDS

Certificates: The Complete 2022 Web Development Bootcamp (Udemy), Machine Learning Specialization (Coursera)

Honors: 2021 Dean's List, Women in Technology Scholarship, Seymour Schulich Scholarship in Computer Science