# Shevinu Nawalage

40 Graves Street, St. John's, NL, CA

#### Education

# Memorial University of Newfoundland

Bachelor of Science in Computer Science (GPA: 3.91 / 4.0)

 $\mathbf{Sep.}\ \ \mathbf{2021-April}\ \ \mathbf{2025}$ 

St. John's, NL

# Relevant Coursework

- Data Structures and Algorithms
- Discrete Mathematics for Computer Science
- Software Engineering

- OOP and Human-Computer Interaction
- Foundations of Computer Systems
- Computer Architecture and Design

# Personal Projects

# SafePass | Java, SQL, JUnit

May 2023 - Present

- Developed "SafePass," a secure desktop password manager, emphasizing local storage for improved data security.
- Enhanced security with PBKDF2 HmacSHA256 hashing and salting for reliable password storage.
- Built SafePass for extensibility, using plug-in interfaces, MVC design pattern, and core OOP concepts to create a scalable codebase.
- Ongoing: Utilizing Spring Boot for enhanced functionality and configuration, implementing a SQL database for data management, and creating a user-friendly interface with JavaFX.

Sheldon | Python, Flask, HTML, CSS, JavaScript, AWS Elastic Beanstalk

May 2023 - June 2023

- Developed a responsive Full-Stack Chatbot application using OpenAI API, specifically tailored to respond to queries related to portfolio building, thereby streamlining user interaction.
- Implemented a persistent caching mechanism to optimize response times and significantly reduce the number of costly API calls.
- Leveraged AWS Elastic Beanstalk for efficient application deployment and management, ensuring high availability and scalable performance.

#### Data Structures and Algorithms | Java, Python

April 2023 - Present

• Designed and maintained a comprehensive, regularly updated GitHub repository that presents solutions to over 75 complex problems encompassing diverse topics in data structures and algorithms.

# **School Projects**

# Can't Stop | Java, Swing

January 2023 - April - 2023

- Collaborated with a team of four to develop a desktop game that digitally replicates the Can't Stop Board Game.
- Specialized in back-end development, designed and implemented the game logic using Java, effectively translating the physical game rules into a virtual environment.
- Implemented a comprehensive algorithm to determine the relative positioning of the pieces on the board according to the dice rolls. Algorithm also determines the winner based of the dice positioning represented in multiple data structures
- Implemented load/save functionality through serialization utilizing Data Storage classes to save the current state of the board allowing for the future possibility of networking as well.

#### Experience

#### Memorial University of Newfoundland - CITL

Oct 2022 - April 2023

Design and Development Assistant

St. John's, NL

- Designed and deployed interactive educational webpages and posters using HTML and CSS.
- Created instructive modules simplifying Windows, Mac, and Chrome OS operations for tech novices, bridging the knowledge gap and empowering users.
- Performed an extensive usability analysis on the Brightspace website and proposed user-centric enhancements to bolster
  efficiency and user experience.

# Technical Skills

Languages: Python, Java, HTML, CSS, JavaScript, SQL

**Developer Tools**: PostgreSQL, Git, pip, VS Code, IntelliJ IDEA, terminal

Technologies/Frameworks: JUnit, Swing