Sudeep Srisailapu

18992 64th Ave N | Maple Grove, Minnesota, 55311 | srisailapu@wisc.edu | 763-257-6697 | Github:
https://github.com/sudeepsrisailapu

EDUCATION

University of Wisconsin-Madison | Madison, WI   *May* **2026**

Bachelor of Science: B.S. Computer Science
- GPA: 3.12
- Relevant Coursework: *Object-Oriented Programming, Data Structures, Project Design and Development, Mobile App Development, Introduction to Artificial Intelligence*
- Certifications: *AWS Certified Cloud Practioner*

EXTRACURRICULAR ACTIVITIES

Cybersecurity Club UW | Member
- Participated in weekly meetings, gaining insights into industry trends and core concepts essential for technical interviews. Engaged in discussions and problem-solving sessions to enhance readiness for real-world challenges in cybersecurity.
- Collaborated with team members to apply concepts from coursework to practical scenarios, working on real-world cybersecurity challenges and hands-on situations
- Participated in hands-on workshops to explore advanced cybersecurity concepts, deepening technical knowledge and practical skills. Engaged in sessions on topics like threat detection, network security, and ethical hacking, building a stronger foundation in cybersecurity principles.

LeetCode Club UW | Member
- Participated in weekly meetings focused on solving algorithmic problems and exploring key interview topics, gaining valuable insights into trends and techniques for technical interviews. Collaborated with peers to refine problem-solving strategies
- Collaborated with peers to tackle complex algorithmic problems, exchanging strategies and debugging techniques to optimize solutions.

PERSONAL PROJECTS

Personal Portfolio Website
- Demonstration of implementing interactive elements such as animations, hover effects, navigation elements, and buttons to help streamline the user experience
- Demonstration of a responsive and aesthetic design, ensuring that the viewing experience is seamless across various devices, regardless of the given screen size

Calculator App
- Multiple interactive elements, give the user different options for math operations
- Error catching certain mathematical operations(dividing by zero) and user input(adding words/letters, etc.)
- Correct execution of math operations including addition, subtraction, multiplication, and division
- Separate screen for the result, displaying the result of the user operation

TECHNICAL SKILLS

Programming Languages:
- Java (Advanced),
- Python (Advanced),
- HTML (Intermediate),
- CSS (Intermediate),
- Javascript (Intermediate)
- XML(Advanced)
- Kotlin(Advanced)

Tools and Technologies:

- IntelliJ
- Eclipse
- Android Studio
- PyCharm

Programming Skills:
- Data Structures (Graphs, Balanced Search Trees, Hashtables)
- Object-Oriented Programming
- Frontend and Backend Development
- Website Development
- Sorting Algorithms (Linear Sorts)

COURSE PROJECTS

Campus Map Application Development | April 2024
- **App Description:** The app utilizes JavaFX to create a GUI that provides the user with campus locations that the user can manipulate to return important travel information
- **Role:** Responsible for backend development, integration with frontend API using JavaFX, coding of test cases to test backend functionality
- **Accomplishments:** Successfully incorporated backend features, allowing for the reading of campus locations and app functions including travel times, shortest travel path, and the most distant location from a certain point

Song Application Development | February 2024
- **App Description:** The app provides the user with a menu interface, allowing the user to read a .txt file of songs and return important information from the list based on menu options and user input
- **Role:** Responsible for frontend development, integration with backend API, coding of test cases to test frontend GUI functionality
- **Accomplishments:** Successfully incorporated application features, allowing the reading of files and sorting by genre, decibel count, and popularity through the application menu

Red-Black Tree Insertion Algorithm Development | February 2024
- **Project Description:** This project required the development of the rotate method and red-black tree class, with the rotate node providing the means to shift nodes and the red-black tree class having the properties to determine when nodes should be rotated
- **Role:** Responsible for the Red-Black Tree class, rotate method, and red-black tree test cases to ensure proper functionality
- **Accomplishments:** Successfully incorporated insertion algorithm and rotate method, ensuring red-black tree properties are obeyed and followed properly when inserting nodes (Black Aunt Line, Black Aunt Zig, Red Aunt)

Hashtable Map | April 2024
- **Project Description:** This project focused on the implementation of the HashtableMap class and the development of the methods required to implement the proper functionality of the hashtable map allowing for functions such as mapping keys to values and efficient operations such as insertion, deletion and lookup
- **Role:** Responsible for the development of the HashtableMap class and the coding of the methods that allowed hashtable functions such as lookup, insertion, and deletion
- **Accomplishments:** Successfully implemented HashtableMap class and tests, allowing and testing for the proper functionality of the data structure when inserting, deleting, and finding pairs

GPS Application Development | October 2024
- **Project Description:** This project is focused on the implementation of non-UI threads using coroutines to create a GPS tracker that returns multiple aspects of information based on where the user picks on the map
- **Role:** Responsible for layout, ensuring that the main screen of the app displayed extra information such as altitude, longitude, etc. Also responsible for app code, enabling the app to request user permissions and allowing the app to access the location data, enabling the GPS to work and allowing the user to gain more information.

- **Accomplishments:** Successfully implemented GPS, allowing the app to ask users for location information and returning the correct location information based on user pick

Note Application Development | October 2024
- **Project Description:** This project is focused on the implementation of persistent storage in applications through the use of SharedPreferences, Databases, and Local file storage
- **Role:** Responsible for the implementation of SharedPreferences to store login information and cache data, along with the setup of a local database to store user-related information, along with the ability to update, insert, query, and delete information
- **Accomplishments:** Gained valuable experience using SharedPreferences and Local databases, helping gain knowledge about more secure and efficient means of storage.

Digitial Shredder Project | September 2024
- **Project Description:** Developed a Python program to identify a shredded letter's language (English or Spanish) using probabilistic methods.
- **Role:** Responsible for implementing applied Bayes' rule and multinomial probability calculations for language detection. Also implemented computational optimizations to prevent underflow in large datasets.
- **Accomplishments:** Gained hands-on experience with text processing, character frequency analysis, and real-world applications of Bayesian inference in natural language processing

Linear Regression Project | October 2024
- **Project Description:** Helped develop a linear regression model using Python to analyze historical Lake Mendota ice cover data.
- **Role:** Responsible for data curation, min-max normalization, model visualization, closed-form solution derivation, and optimization through gradient descent.
- **Accomplishments:** Helped gain experience with data analysis and optimization, helping develop skills toward predictive modeling