Rudra Patel
Jersey City, New Jersey, 07307
Rrp3827@gmail.com | LinkedIn | GitHub

Motivated Computer Science junior at Rutgers University seeking an internship to leverage my diverse skills (Java, C++, R, web development) in a collaborative, innovative tech environment. Eager to contribute and learn from industry experts.

EDUCATION

Rutgers University, New Brunswick, NJ Dec 2024
Bachelor of Science, Computer Science
Related Courses: Java Programming, Data Structures & Algorithms, Computer Architecture, Data Visualization

SKILLS

- Programming Languages: Java, C, C++, Python3(NumPy, Pandas, Matplotlib), R, Php
- Database Systems: MySQL, Microsoft Access, Oracle SQL
- Web Technologies: HTML, CSS, Bootstrap, JavaScript, Git
- Soft Skills: Public Speaking, Creative, Problem Solving, Critical Thinking

PROJECTS

Rutgers University
Infinity War | Java, OOPs, Graph, HashMap, Array 01/2023 – 05/2023

- Leveraged advanced graph algorithms and implemented adjacency matrices to tackle intricate challenges
- Designed and created Java classes for seamless input/output, employing advanced data structures like Array Lists and HashMap for efficient data management

Kindergarten Classroom Simulation | Java, OOPs, Linked List, Arrays 09/2021 – 12/2021

- Developed a comprehensive project, using Singly Linked Lists, 2D arrays, and Circular Linked Lists to model classroom activities.
- Efficiently managed student entry, seating arrangements, and a musical chairs game within the simulation
- Implemented fair student seating logic based on seating availability and height order, enhancing gameplay realism.

Huffman Coding for Text Data Compression | Java, OOPs, Graph, Tress, Array 01/2023 – 05/2023

- Designed and implemented a highly efficient Huffman Coding algorithm in Java, achieving up to a 60% reduction in file sizes.
- Ensured data integrity throughout the compression process, demonstrating advanced expertise in algorithmic efficiency and accuracy.
- Developed and applied graph traversal algorithms (DFS and BFS) to efficiently explore and analyze graph structures, solving problems like finding shortest paths and detecting connected components.

ACHIVEMENTS

Kaggle Competition

- Secured a coveted top 3 position out of 250 participants through a data-driven approach focused on predicting Citi Bike demand.
- Implemented innovative feature engineering techniques, including the integration of weather and holiday indicators, significantly boosting model accuracy.
- Conducted fine-tuned hyperparameter optimization within R, aligning with competition guidelines to optimize models for efficient and CSV-ready predictions.