Sk Naimul Islam Nayeem

Terre Haute, IN | nayeems@rose-hulman.edu | (812) 538-9229 | LinkedIn | Portfolio

Seeking an internship in software development, AI, or data analysis to apply my programming and problem-solving skills while continuously learning and expanding my knowledge

Education: Bachelor of Science, Computer Science

May 2027

Rose-Hulman Institute of Technology, Terre Haute, IN

Related Courses: Software Development, Data Structures and Algorithm Analysis, Object-Oriented Software Development, Web Programming, Systems Programming, Digital Systems, Linear Algebra, Discrete Math,

Calculus, Entrepreneurship

Skills: Programming Languages: Python, Java, C, Assembly (ARM)

Web Development: HTML, CSS, SCSS, JavaScript, React, Tailwind, Framer Motion

Tools & Frameworks: PlantUML, Matplotlib, Maple, Verilog, FPGA, Quartus, GitHub, LoggerPro,

Adobe PS, MS Word, Excel, PowerPoint, WordPress, Wix, Flask, Docker, TMDB API

Technical: Router installation, Operating systems setup, Phone rooting

Operating Systems: Windows, Android, Linux

Projects: MindMatch: AI Movie Recommender [Link]

May 2025-Sep 2025

- Built a 16-question psychology quiz that maps answers to a normalized feature vector; matched against movie trait vectors to generate recommendations
- Implemented weighted cosine similarity for ranking and a diversification re-rank (MMR) with seeded tiebreaks to avoid repetitive lists
- Shipped REST/recommend API and instrumented logs/tests for deterministic ordering and debuggability
- Developed a responsive React UI with animated match bars, radar chart, and poster carousel; integrated TMDB posters; containerized with Docker

Editor Trees: Height-balanced text editor tree (Java)

Dec 2024-Jan 2025

- Designed and implemented a height-balanced tree data structure for a text editor, ensuring efficient operations like insertion, deletion, and retrieval with O (log N) complexity
- Collaborated in pair programming practices to develop and debug algorithms efficiently and accurately, meeting strict performance constraints and unit testing

Graph Surfing: Graph ADTs & algorithms (Java)

Dec 2024-Mar 2024

- Designed and implemented a graph traversal tool using adjacency lists and BFS/DFS algorithms to simulate "surfing" through connected nodes
- Modeled both directed and undirected graphs, enabling dynamic pathfinding and exploration based on connectivity and user input

Java Game (Jetpack Joyride spec)

Mar 2024-May 2024

- Developed a Java-based game following the Jetpack Joyride specifications, including hero movement, levels, coins, barriers, laser, and missiles
- Implemented core features such as increasing difficulty, collision detection, and level progression based on pre-configured text files

Weather Data Analyzer (Python)

Nov 2023-Feb 2024

- Created an interactive Python program to analyze weather data, generating visualizations (line plots, scatter
 plots, histograms, pie charts) and custom statistics (average, max, and lowest temperature, precipitation etc.)
 using Matplotlib
- Developed a user-friendly interface for customizable data exploration, allowing users to select weather metrics and ranges, time period, and cities, while ensuring functionality with unit tests

Work: Rose-Hulman AskRose Homework Help, Terre Haute, IN

Feb 2024-Jan 2025

STEM Tutor & Supervisor

- Tutored over 20 students every week in grades 6-12 in math, science, and programming
- Communicated complex concepts in STEM using simple, understandable language for students

Fiverr, Remote Jun 2019-Apr 2021

Freelancer

• Designed graphics and developed 20+ websites with WordPress and Wix

Delivered customized design solutions for clients across diverse industries

Clubs: Computer Security Club; RISE (Entrepreneurship); Rose-Hulman eSports Club
Leadership: Lambda Chi Alpha Fraternity, Terre Haute, IN

Nov 2023-Sep 2025 Nov 2023-Sep 2025

Initiated Member & Philanthropy Chair elect

• Raised 457 lbs of food in a campus-wide drive as Philanthropy Chair; led outreach and logistics