Sk Naimul Islam Nayeem

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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 tie-breaks 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**   **Nov 2023-Sep 2025**
Leadership: **Lambda Chi Alpha Fraternity**, Terre Haute, IN   **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