

Avneesh Kumar Singh

Tumakuru, Bengaluru, 530068 — 7523819239 — avneesh.1si22cs032@gmail.com — LinkedIn Profile

EDUCATION

Bachelor of Technology

Siddaganga Institute of Technology, Tumakuru, Bengaluru

Computer Science and Engineering Current

CGPA: 8.88

Relevant Coursework:

- Data Structures and Algorithms
 - Web Technologies
 - Theory of Computation
-

SKILLS

- HTML/CSS
 - JavaScript
 - Basics in C/C++
 - Fundamentals of Data Structures and Algorithms
-

PROJECTS

River Crossing Problem (Jealous Husbands Scenario)

- Developed a depth-first search (DFS) with backtracking algorithm to solve the "Jealous Husbands" problem, involving multiple married couples and strict jealousy constraints.
- Defined and tracked each state, including positions of all individuals, boat location, and crossing count, ensuring no wife was left alone with another woman's husband.
- Implemented recursive move functions to handle pair and individual crossings and prevent constraint violations, triggering backtracking when necessary.
- Achieved an efficient solution for $n=3$ couples, with an exponential time complexity of $O(2^{2n})$ and a space complexity of $O(n)$.

Smart AI Therapist Development Project (still working)

- Utilized large language models (LLMs) to train a smart AI therapist, capable of empathetic and adaptive responses. • Integrated LLMs through LangChain to facilitate seamless conversational flows and natural language processing.
- Leveraged Hugging Face pre-trained models for enhanced understanding and response generation in therapeutic contexts.
- Incorporated Composio for secure API key management and streamlined LLM connectivity.

ACHIEVEMENTS

- Achieved runner-up position in a competitive cricket tournament, demonstrating teamwork and strategy.
- Solved 100+ coding problems on platforms like LeetCode, GeeksforGeeks, and CodeChef.

ACTIVITIES

- Competed in the SMART India Hackathon, contributing innovative ideas and technical skills to solve complex challenges.

EXPERIENCE

Black Pearl 2022 – 2023 Best acting club of Siddaganga Institute of Technology. Won multiple awards, including runner-up in IIT Bombay.

Coding Competitions Participated in various coding competitions across colleges, gaining experience competing with other bright minds.

SOFT SKILLS

- Management Skills
- Creativity
- Critical Thinking
- Leadership