Nakul Rao

Skills

* **Proficient in Python and Data Structures & Algorithms:** Demonstrates strong problem-solving skills crucial for competitive programming and building efficient AI/ML models. Includes mastery of common data structures (trees, graphs, heaps) and algorithms (searching, sorting, dynamic programming).

* **Mastery of React/Angular/Vue.js and associated frontend technologies:** Builds high-performing, user-friendly web interfaces. Includes proficiency in HTML, CSS, JavaScript, and state management libraries like Redux or Vuex.

* **Node.js/Express.js or similar Backend Framework Experience:** Develops robust and scalable server-side applications. Includes experience with databases (SQL and NoSQL), RESTful APIs, and server-side rendering techniques.

* **Solid Understanding of Blockchain Fundamentals and Smart Contract Development (Solidity/Vyper):** Demonstrates the ability to build and deploy decentralized applications (dApps) on platforms like Ethereum. Includes knowledge of cryptographic principles and consensus mechanisms.

* **Experience with Machine Learning Libraries (TensorFlow/PyTorch) and model building:** Creates and deploys AI/ML solutions. Includes skills in model training, evaluation, and deployment, along with familiarity with common ML algorithms (regression, classification, clustering).

Personal Info

Name: Nakul Rao

Email: chaudryavni@example.net

Phone: 4342091465

College: Symbiosis Institute of Technology (SIT)

Career Objective

To leverage my diverse skillset in competitive programming, full-stack web development (including web3), and AI/ML to build innovative and impactful solutions. Seeking a challenging role where I can contribute to a cutting-edge technology team and continuously expand my expertise.

Achievements

Achievement 1:

Developed a novel, high-performance algorithm for optimal resource allocation in distributed systems, resulting in a 35% reduction in processing time for a large-scale simulation compared to existing state-of-the-art solutions. This algorithm, implemented in C++ and optimized using advanced data structures, was a core component of a college-wide research project modeling traffic flow in smart cities. The project won first place in the regional ACM International Collegiate Programming Contest and earned publication in a peer-reviewed conference proceedings. The algorithm's efficiency is further showcased through a publicly available GitHub repository demonstrating its scalability and robustness.

Achievement 2:

Designed and built a fully functional decentralized application (dApp) for secure, transparent voting using Ethereum smart contracts. This project featured a user-friendly frontend interface built with React and a robust backend using Node.js and Solidity, ensuring both accessibility and security. The dApp successfully addressed common vulnerabilities in online voting systems, such as double voting and vote manipulation, demonstrating a strong understanding of blockchain technology and secure coding practices. The project was highlighted at the university's annual technology showcase and earned the student a research assistantship in the university's cryptography lab focusing on Web3 security implementations.