Sneha Bichkunde

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Information Technology student specializing in full-stack development (MERN) and low-level systems programming (C/C++). Driven to build performant, scalable software by applying robust data structures and algorithms.

Education

- **Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded** — *CGPA: 8.3/10*
  B.Tech in Information Technology — 2022–2026
  – Coursework: Data Structures & Algorithms, Operating Systems, DBMS, Computer Networks, OOP
- **HSC (88.8%) & SSC (92.4%)** — 2021 & 2019
  Sant Tukaram National Model School & Lal Bahadur Shastri Vidyalaya

Projects

- **Digital Diary** (GitHub, Demo) — *2024*
  A full-stack MERN journaling app with secure authentication and speech-to-text input.
  – Engineered a modern MERN-stack application (React, Vite, Tailwind) with a core speech-to-text journaling feature.
  – Architected a secure Node.js/Express backend, enforcing user-specific data access with JWT authentication and providing RESTful APIs for managing entries, drafts, and tags.
- **Interactive Portfolio Terminal** (GitHub, Demo) — *2023*
  A responsive web-based terminal portfolio built from scratch with vanilla JavaScript.
  – Architected a unique dual-interface: a full-featured, typeable terminal for desktop and a touch-friendly command-chip UI for mobile, demonstrating user-centric design.
  – Built the core logic in vanilla JS, showcasing deep DOM/event handling, and optimized a p5.js background simulation from $O(n^2)$ to $O(n \log n)$ with a Quadtree.
  – Implemented a multi-theme engine with state persistence using the browser's 'localStorage' API.
- **my_shell** (GitHub) — *2023*
  A POSIX-compliant shell in C with an interactive REPL and advanced user controls.
  – Developed a feature-rich UI with the ncurses library, implementing Emacs-style keyboard shortcuts (e.g., CTRL+A/E/K/U) for efficient line editing.
  – Engineered a reverse search history (Ctrl+R) to allow users to quickly find and re-execute commands.
  – Implemented core shell functionality, including directory navigation (cd), file listing (ls), directory creation (mkdir), and file removal (rm).

Skills

- **Languages**: C, C++, JavaScript (ES6+), Python, Bash
- **Web & Databases**: React, Node.js, Express, RESTful APIs, MongoDB, MySQL, HTML/CSS
- **Systems Tools**: Data Structures, Algorithms, Docker, Git, GDB, Linux, System Programming

Achievements

- **Competitive Programming** — *2022–Present*
  Solved 500+ problems across LeetCode (SnehaBichkunde) & GeeksforGeeks (bichkund5ad6).
- **Winner, National Math Quiz Competition** — *2023*
  Secured 1st place out of 200+ national participants in the 'Math-E-Magic' competition.

Leadership Extracurricular

- **Secretary, Bhaskaracharya Maths Club** — *2024–Present*
  Spearheaded 'Mathemagic,' a national math contest for 200+ participants; mentored 15+ junior students.
- **Core Member, SGGS Web App Game Developers Club** — *2022–2023*
  Co-organized a 36-hour hackathon for 50+ students; developed the event registration website using React.js.

Interests

- Backend Engineering, Systems Programming, Distributed Systems, Algorithm Design