Nishant Sharma

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EDUCATION

Siliguri Institute of Technology | MAKAUT - *June 2021 - June 2025*
Bachelor of Computer Science and Engineering (4 years) **CGPA - 8.70**

Sarwan Memorial School (ICSE) - *2007 - 2019*
Percentage - 88.8%

TECHNICAL SKILLS

- **Programming Languages:** C++, TypeScript, Python
- **Frameworks & Runtime Systems**: Next.js, React.js, Express.js, Raylib5, WebAssembly
- **Systems & Infrastructure:** Nutanix AHV/AOS, VMware ESXi, Linux (Arch), Docker
- **Networking & Cloud:** CCNA, OSPF, VLAN, IPTables, Hyperconverged Infrastructure (HCI)
- **Development Tools:** Git, Postman, Socket.io, OAuth 2.0
- **Databases:** MongoDB, SQL, PostgreSQL

EXPERIENCE

NUTANIX   System Reliability Engineer, Intern(Jan 2025 - June 2025)

Interned at Nutanix, gaining hands-on experience with cloud infrastructure, virtualization, and networking. Managed VMs and clusters on ESXi and Nutanix, migrated legacy JavaScript pages to React, enhanced API communication, and wrote Docker scripts for containerized deployments.

Key Contributions:
- Engineered a **Linux From Scratch** (LFS) system with custom kernel modules, bootloaders, and system initialization, gaining deep expertise in OS internals and low-level system configurations.
- Achieved **CCNA** certification with hands-on implementation of network topologies, VLAN segmentation, OSPF routing protocols, and SDN architectures.
- Architected and deployed 50+ KVM-based virtual machines across Nutanix AHV clusters, implementing high-availability configurations with 99.9% uptime and automated failover logic.
- Refactored 15+ legacy **JavaScript** components into modern **React** architecture, reducing technical debt by 30% and merged 5+ pull request.
- Explored virtualization technologies such as VMware **ESXI**, deploying and managing virtual machines efficiently.

PROJECTS

Wasm Games - Website
- Engineered an interactive gaming platform enabling users to play high-performance games developed using C++, directly in the browser. Leveraged the capabilities of **WebAssembly** (WASM) and **Emscripten** for near-native execution speeds. Utilized advanced Object-Oriented Programming (OOP) principles and raylib framework.

Order Matching Emgine - Article
- I built a high-performance order matching engine in C++ using **Red-Black Trees** to manage BUY and SELL orders efficiently. Orders are parsed from JSON files, matched by lowest ask and highest bid on the same token, and dynamically updated. The system prioritizes volume-maximizing trades over price optimization, simulating a real-time exchange environment.

LiveScript - Gitlab
- Developed a real-time collaborative code editor using **React.js**, **Socket.io**, and **Express.js**, achieving sub-100ms latency for content synchronization. Integrated **CodeMirror** for syntax highlighting and **Formik/Yup** for secure, validated authentication.

Social Media Marketing Automation - Gitlab
- Created a **python** automation script using YouTube and Reddit APIs that searches and comments on content matching specific queries, increasing platform visibility. Generated 97+ organic visitors, 172 page views, and achieved a 70% bounce rate through targeted API-driven engagement.

CERTIFICATIONS AND COMMUNITY EXPERIENCE

- CCNA Certified - Network architecture, VLAN configuration, subnetting, OSPF routing protocols, and SDN implementation
- Competitive Programming Core Member - Google Developer Students Club, SIT
- Legacy JavaScript Data Structures and Algorithms - freeCodeCamp.org

ACHIVEMENTS

- Winner of intra-college hackathons **CodeKraft**, **CodeXQuest** and **TechFrenzy**.
- 300+ LeetCode problems solved - Advanced algorithmic problem-solving (Account: nishant892)