

Nandan Upadhyay

Vadodara, Gujarat 391740

📞 9998762172 ✉️ menotnandan6969@gmail.com  [linkedin.com/in/nandanupadhyay](https://www.linkedin.com/in/nandanupadhyay)  github.com/NandanUpadhyay2611

Skills

- **Languages** : C, C++, SQL, HTML, CSS, JavaScript, Java, Python, Typescript
- **Frameworks** : React.js, Express.js, Node.js, MongoDB, PostgreSQL, Next.js, Tailwind CSS
- **Coursework** : Algorithms Analysis, Operating System(OS), Data Structures, Networking, Database (DBMS), Software Engineering
- **Miscellaneous** : Linux, Shell (Bash), Git, Vs code, Prompt Engineering, AWS

Projects

Multi-threaded Proxy Server with LRU Caching / C language, Linux

Apr 2024 - June 2024

- Developed a robust multi-threaded proxy server in C, handling up to 10 concurrent client connections and leveraging POSIX threads **for 80% higher throughput**.
- Implemented a hybrid hash map + doubly linked list LRU caching solution, reducing average response times by **70%** through rapid lookups and streamlined eviction policies.
- Ensured thread-safe operations using mutex locks and condition variables, effectively eliminating race conditions and maintaining data integrity in high-concurrency environments.
- Github Repository Link: <https://github.com/NandanUpadhyay2611/MultiThreadedProxyServer>

RESTful E-commerce API / Node.js, Express, MongoDB, JWT

Dec 2024 – Jan 2025

- Architected a secure, high-performing E-commerce REST API (**99.9% uptime**) with JWT based user authentication, reducing unauthorized access by **90%**.
- Streamlined product management using a role-based access system for admins, handling up to 3,000 daily CRUD operations and cutting endpoint response times by **25%**.
- Built a scalable shopping cart module (add, update, remove items) and checkout flow, improving order processing speed by **30%**.
- Github Repository Link: <https://github.com/NandanUpadhyay2611>

Repo-Pilot : Developer Tool | React, Node.js, Express.js, Gemini API, Assembly API, LangChain

Feb 2025 – Mar 2025

- Currently working on “Repo-Pilot,” a developer collaboration platform, boosting teamwork efficiency by an estimated **40%**.
- Implemented AI-driven automatic documentation for Github project repository, commit message summaries, and codebase search, accelerating code reviews and reducing onboarding time by **30%**.
- Established a GitHub RAG (Retrieval-Augmented Generation) pipeline, ensuring seamless repository management and enhanced developer transparency.
- Github Repository Link: <https://github.com/Nandanupadhyay2611>

Achievements

- Secured 2nd Runner-Up, **WebKaHackathon** – Led frontend development for a **finance management system**, designing an intuitive UI and seamless functionality to enhance user engagement.
- Engineered Water Wise, a knowledge-sharing app for water conservation at GearUp Season Hackathon, optimizing UI to boost content discovery and engagement by **25%**.
- Solved over **300+** problems on platforms such as **Leetcode** and **Geeks For Geeks**.
- Contributed to open-source projects during **GirlScript Summer of Code** and **HacktoberFest**, resolving **10+** bugs, implementing **5** features, and collaborating globally to enhance project functionality.

Certifications

- **Design and Analysis of Algorithm – (Coursera)** July 24 – Oct 24
- **Cloud Computing (NPTEL)** Feb 24 – Apr 24

Education

Lovely Professional University | Jalandhar, Punjab

Aug 22 – Jul 26

Computer Science and Engineering — CGPA: 7.70