Nitish Jha

New Delhi, India |+91-7678303875 | <u>Linkedin</u> | <u>Github</u> | Nitishj221102@gmail.com

Education

StarexUniversity	**Aug 2023 - Present**
BTech in Computer Science| SGPA: 8.59	Gurugram, Haryana

Experience

Summer of Bitcoin 2025 @ Shopstr | *Student Developer*   **May 2025 - Sep 2025**

- ❖ **Rust Lightning Backend:** Built a production-ready **Rust/Axum** service to manage non-custodial Lightning nodes via **Blockstream Greenlight**, enabling **BOLT 12** offer creation and encrypted seed storage on Bitcoin Mainnet.
- ❖ **BIP353 Identity System:** Architected an asynchronous **TypeScript** API to generate human-readable payment addresses (e.g., user@domain); designed a **Redis** job queue to handle high-volume DNS TXT record propagation via the **Cloudflare API**.
- ❖ **Nostr Integration:** Implemented **NIP-05** and **NIP-49** protocols for Shopstr's main client to verify user identities and public keys against the new merchant username system.
- ❖ **Technologies:** Rust, Axum, TypeScript, Redis, PostgreSQL, Cloudflare Workers, Docker, Lightning Network (BOLT12)
- ❖ <u>**NIP Implementation**</u> | <u>**Merchant Username Project**</u>

Software Engineer Intern @Classplus   **Nov 2024 - Jan 2025**

- ❖ Developed and migrated APIs, abstracting database queries using ORMs in TypeScript.
- ❖ Built scalable server infrastructure in Go (Golang), supporting SQL (MySQL) and NoSQL (MongoDB) databases.
- ❖ Improved backend workflows, optimized CI/CD pipelines, and ensured code quality through regular reviews and testing.
- ❖ **Technologies:** TypeScript, Golang, Python, MySQL, MongoDB, ORMs, Docker, Git/GitHub

Google Summer of Code 2024 @R Project | *Student Developer*   **May 2024 - Aug 2024**

- ❖ Contributed to the data.table package, resolving issues and enhancing functionality
- ❖ Improved performance optimizations and documentation for better user experience.
- ❖ Collaborated with a global open-source community, working with R, C, GitHub, and Docker.
- ❖ **Technologies:** R, C, Docker, GitHub
- ❖ <u>**GSoC'24 work report**</u> | <u>**Contributions**</u>

Other Open Source Contributions

<u>Scarpe</u>   **Dec 2023 – Feb 2024**

Ruby, Open Source Contribution

- ❖ Contributed to Scarpe, an early-stage prototype aimed at resurrecting the Shoes library.
- ❖ Successfully merged 10 pull requests, improving functionality and fixing critical bugs.
- ❖ Added new features such as tooltip, font-family, and font-weight, enhancing the library's user experience.
- ❖ <u>**Contributions**</u>

Skills

- ❖ **Programming:** Rust, TypeScript, Go (Golang), R, C, Python, Java, Ruby, JavaScript.
- ❖ **Frameworks:** Axum, Next.js, React.js, Node.js, Express.js, Ruby on Rails.
- ❖ **Protocols:** Bitcoin, Lightning Network, Blockstream Greenlight, Nostr, REST APIs.
- ❖ **Tools:** Docker, Git/GitHub, Cloudflare Workers, Postman, Linux.
- ❖ **Databases:** PostgreSQL, MySQL, MongoDB
- ❖ **Soft Skills:** Time Management, Problem‑solving, Documentation, Engaging Presentation, Leadership, On‑site coordination

Achievements

- ❖ **Summer of Bitcoin 2025:** Successfully completed a project with **Shopstr**, developing production-ready API backends in **TypeScript** and **Rust** for their merchant-username project, involving **Lightning Network** (BOLT12) and **Bitcoin** (BIP353, NIP-05/49) protocols.
- ❖ **Google Summer of Code 2024 (GSoC)**: Successfully completed a project with the data.table package in collaboration with the R Project. Contributed extensively to resolving issues, improving documentation, and implementing new features in the open-source package
- ❖ **Open Source Impact:** Successfully merged **35+ total Pull Requests** across Shopstr, R Project (data.table), and Scarpe repositories.

Certificates

- ❖ [**Summer of Bitcoin**](#)**,** Summer of Bitcoin 2025
- ❖ [**Google Summer of Code**](#)**,** Google Summer of Code 2024
- ❖ [**ClassPluss Intership certificate**](#)**,** Classpluss Internship 2024