



# Suryansh Verma

Bachelor of Technology  
Electrical Engineering  
National Institute of Technology, Patna

+91-9580104753  
[suryanshv.ug23.ee@nitp.ac.in](http://suryanshv.ug23.ee@nitp.ac.in)  
[linkedin.com/in/suryanshverma](https://linkedin.com/in/suryanshverma)  
[github.com/suryanshvermaa](https://github.com/suryanshvermaa)  
[suryanshverma.vercel.app](https://suryanshverma.vercel.app)

## EDUCATION

- **B.Tech., Electrical Engineering** Mar 2027  
*National Institute of Technology, Patna* CGPA: 8.26
- **Senior Secondary (12th)** May 2022  
*Pt. Deen Dayal Upadhyay Saraswati Vidya Mandir, UP Board* 82.8%
- **Secondary (10th)** May 2020  
*Pt. Deen Dayal Upadhyay Saraswati Vidya Mandir, UP Board* 86.17%

## EXPERIENCE

- **Conference Website**, Full Stack Developer Jan 2025 – Present
  - Built a full-stack [conference platform](#) using **React, Node.js, Express** with modular and maintainable components.
  - Containerized and deployed using **Docker** on Vercel/Render, improving reliability and release workflow.
- **Open Source Contribution**, Backend Developer Jan 2025 – Present
  - Developed and maintained [create-express-mongo-prod](#), a CLI that scaffolds Express apps (TS/JS) with MongoDB/Mongoose or PostgreSQL/Prisma, Docker, ESLint, Prettier, and Husky.
  - Added optional integrations (**Redis, Kafka, Socket.IO, BullMQ, AWS S3**) and automated setup via interactive prompts to reduce developer onboarding time.

## PROJECTS

- **SCS Cloud: Distributed Media Processing & Container Service** Oct 2025  
*Tech Stack: Go, TypeScript, Node.js, React, Kubernetes, Docker, gRPC, PostgreSQL, MongoDB, Redis, AWS S3* 
  - Architected a **distributed microservices platform** on Kubernetes enabling scalable media processing, multi-tenant container execution, and object storage.
  - Built a **gRPC-based orchestration service** that automated pod provisioning and secure scheduling, improving cluster utilization and reliability.
  - Designed and optimized a parallel **HLS transcoding pipeline**, achieving **4050% faster** encoding through queue workers and concurrency tuning.
  - Implemented subdomain routing and a cache-optimized CDN layer, reducing content delivery latency by **40%**.
  - Developed a full React dashboard with real-time processing views, object storage explorer, billing workflows, and integrated AI-powered assistance.
- **Scalable Todo Management System with C++ Backend & CI/CD** Jul 2025  
*Tech Stack: C++20, Drogon, CMake, PostgreSQL, Docker, Kubernetes, Jenkins, ArgoCD* 
  - Built a high-performance **REST API** in C++20 using Drogon with **JWT authentication**, bcrypt hashing, and PostgreSQL ORM, supporting thousands of concurrent requests.
  - Implemented custom middleware for **auth, rate limiting, CORS, and async error handling**, improving fault tolerance and request throughput.
  - Deployed on Kubernetes with Ingress, Secrets, PVs, HPA, and health checks to achieve **fault-tolerant scaling** and consistent uptime.
  - Built a production-grade CI/CD pipeline using **Jenkins + ArgoCD**, automating tests, builds, scans, and progressive delivery.
  - Achieved **99.9% system availability** by tuning resource configurations, enabling liveness/readiness probes, and optimizing database performance.

## SKILLS

- **Programming Languages**: Java, Python, C++, Go, JavaScript, TypeScript
- **Backend & Frameworks**: Node.js, Express.js, Drogon, Gin, React.js, Next.js
- **Distributed Systems & Cloud**: Kubernetes, Docker, gRPC, AWS (EC2, S3), CI/CD, Linux
- **Databases**: PostgreSQL, MongoDB, Redis
- **CS Fundamentals**: Data Structures & Algorithms, OOP, OS, CN, DBMS, System Design Basics

## CERTIFICATIONS & ACHIEVEMENTS

- Solved **250+ DSA problems** on [LeetCode](#) focusing on algorithms, data structures, and complexity optimization.
- Ranked in the **Top 5%** in NPTEL Joy of Computing with Python by IIT Madras.
- **2000+ GitHub contributions**, showcasing consistent development, debugging, and open-source collaboration.

## POSITIONS OF RESPONSIBILITY

- **Web Team Member**, Hackslash, NIT Patna May 2024 – Present
  - Built the official **Hackslash** and **ByteVerse (NITP hackathon)** websites using Next.js, Tailwind, and Framer Motion.
  - Improved site performance, achieving **40% faster** load times and **15% lower** bounce rates.