

Suryansh Singh

+91-9992052201 | suryanshg2050@gmail.com | linkedin.com/in/suryansh-singh | github.com/devSuryansh
codolio.com/profile/devSuryansh | devsuryansh.in

EDUCATION

Noida Institute of Engineering and Technology

Bachelor of Technology in Computer Science & Engineering | CGPA: 8.6 / 10

Blue Diamond Public School

Senior Secondary (Class XII): 88% | Secondary (Class X): 90%

Greater Noida, India

Jul 2023 – Jun 2027

G.B. Nagar, India

Apr 2019 – Mar 2023

EXPERIENCE

Data for the Common Good

Google Summer of Code Contributor | GraphQL, Apollo Client, D3.js, Zustand, Vitest

Remote

May 2026 – Aug 2026

- **Project Scope:** Architected a *configuration-driven Data Density Heatmap* for GraphQL dataset completeness analysis.
- **GraphQL Engine:** Built a *schema-agnostic Apollo query engine* with dynamic query generation, pagination, and response normalisation.
- **Visualisation:** Developed an interactive *D3.js heatmap* with tooltips, highlighting, zoom/pan, and drill-down support.
- **Testing & Delivery:** Shipped a *production-ready prototype* with API scaffolding and *85%+ Vitest coverage*.

Bitcoin-Fuzz

Summer of Bitcoin Contributor | Python, FastAPI, Go, Docker, Prometheus, SQLite, React, TypeScript

Remote

May 2026 – Aug 2026

- **Campaign Orchestrator:** Built a *FastAPI orchestration service* managing 30+ fuzzing scheduled containers and SQLite state tracking.
- **Go Metrics Agent:** Developed a *Go sidecar* exposing libFuzzer metrics via *Prometheus* with *<10-second latency*.
- **Monitoring Backend:** Implemented *Prometheus/Alertmanager monitoring* and a *SQLite backend* for coverage and crash tracking.
- **Dashboard & Impact:** Delivered a *real-time React dashboard* for Bitcoin-Fuzz, supporting large-scale security testing.

PROJECTS

LeetFight | leetfight.xyz

Real-Time 1v1 DSA Battle Platform | Next.js, Node.js, MongoDB, Socket.IO, Tailwind CSS

May 2025 – Jun 2025

- **Real-Time Engine:** Built a *Socket.IO matchmaking system* enabling 1v1 coding duels with *<100ms latency* and live synchronization.
- **Ranking System:** Implemented an *ELO rating system* for *500+ users* with real-time leaderboard updates.
- **Auth & Modes:** Integrated *Google OAuth 2.0* and *JWT authentication* with *three matchmaking modes*, improving retention by *35%*.
- **Scalable Backend:** Designed REST APIs supporting *1,000+ monthly sessions* on a Node.js/MongoDB stack with *99.9% uptime*.

Twitter Feed Analyzer

Sentiment Analysis & NLP Pipeline | Python, MongoDB, Tweepy, Hugging Face Transformers, Streamlit

Feb 2025 – Apr 2025

- **Data Ingestion:** Engineered a *Tweepy streaming pipeline* that collected *50,000+ tweets* with deduplication and schema validation.
- **Sentiment Inference:** Deployed a *DistilBERT sentiment model* achieving *89% classification accuracy* on Twitter data.
- **Analytics Dashboard:** Built a *Streamlit dashboard* with trend visualizations, keyword heatmaps, and sentiment analysis for *20+ queries*.
- **Data Quality:** Implemented preprocessing pipelines that *reduced noisy and duplicate records by 30%*.

FuturePeek | future-peek.onrender.com

AI-Powered Image Generation Platform | Next.js, Node.js, Hugging Face API, Cloudinary

Oct 2024 – Nov 2024

- **Diffusion Integration:** Built *Stable Diffusion pipelines* using Hugging Face endpoints with *<4-second inference latency*.
- **Cloud Asset Management:** Implemented *Cloudinary media storage* reducing image delivery times by *45%* via CDN caching.
- **Resilient Backend:** Developed *error handling and retry mechanisms* achieving *zero unhandled exceptions* across 200+ test runs.
- **User-Facing UI:** Designed a *responsive Next.js interface* with prompt history and gallery features for *300+ users*.

SKILLS

Languages: Python, C++, SQL, Bash

Frontend: React.js, Next.js, Tailwind CSS, D3.js

Backend: Express.js, GraphQL, REST APIs, WebSockets

Databases: PostgreSQL, MySQL, Redis

AI / ML: PyTorch, TensorFlow, Scikit-Learn, XGBoost, LLMs, NLP

Cloud & DevOps: GitHub Actions, AWS, Vercel, Render, Linux, Nginx

Tools & Platforms: Git, GitHub, Grafana, Postman, Jest

Core Competencies: DSA, System Design, Distributed Systems, Microservices, API Design, Debugging

Soft Skills: Problem Solving, Collaboration, Communication, Time Management

ACHIEVEMENTS

Google Summer of Code 2026 (Top ~7.5%): Selected as *1 of 1,141 contributors* from *15,245 applicants* to build a GraphQL Heatmap.

Summer of Bitcoin 2026 (Top ~1.5%): Selected as *1 of 50 contributors* from *3,272 applicants* to build infrastructure for Bitcoin-Fuzz.

Open Source Contributions: Contributed to *OWASP-BLT*, *Zulip*, *preCICE*, and *Braidpool* with *12+ merged pull requests*.

Competitive Programming: Solved *500+ DSA problems*; achieved *1600+ LeetCode*, *CodeChef 2★*, and top *15% LeetCode* ranking.