

# Ankur Singh

Bangalore, India | [hello@anks.in](mailto:hello@anks.in) | +91 97171 93630 | [anks.in](http://anks.in) |  
[linkedin.com/in/ankursingh13](https://linkedin.com/in/ankursingh13)  
[github.com/rush-skills](https://github.com/rush-skills)

## Summary

---

Experienced software engineer with a strong focus on creating efficient, reliable, and scalable technology solutions that drive business success. Skilled in automating processes, optimizing performance, and ensuring system reliability across various industries, from e-commerce to scientific research. Passionate about using technology to solve complex problems and deliver value to users and stakeholders.

## Experience

---

**Computing Fellow**, European Organization for Nuclear Research (CERN) – Sept 2020 – Feb 2023  
Geneva, Switzerland

- Managed core research compute infrastructure, ensuring high availability for a 250k core compute cluster
- Designed and implemented fault-tolerant DevOps automation with StackStorm, significantly reducing manual workload
- Developed adaptive load shaping solutions for resource-intensive research jobs, addressing critical storage issues
- Automated the roles of two support engineers by designing and implementing automation workflows to handle manual remediation processes for cluster nodes, reducing labor costs, minimizing human error, and improving uptime metrics across the production environment
- Tech Stack: Puppet, MongoDB, Redis, RabbitMQ, Docker, Bash, Python, StackStorm, Kafka, Kubernetes, Golang, Terraform, Foreman, GitLab CI, Grafana, Graphite

**Software Engineer, HPC**, Tower Research Capital – Gurugram, India June 2018 – July 2019

- Administered 4 HTCondor clusters with over 30k cores for high-frequency, low-latency trading operations
- Implemented advanced, real-time monitoring solutions using ELK stack, InfluxDB, and Grafana
- Contributed to setting up a 500-node Kubernetes cluster for infrastructure migration, focusing on scalability and resilience
- Enhanced system performance and reliability, enabling efficient and secure trading operations
- Tech Stack: CFEngine, SaltStack, ELK Stack, InfluxDB, Kubernetes, GPFS, Graphite, Grafana

**Software Engineer, BI/Analytics**, Myntra – Bengaluru, India July 2017 – June 2018

- Developed and optimized data-intensive analytics platforms, improving business intelligence and decision-making efficiency
- Enhanced Universal Dashboarding Platform (UDP) and Data Democracy Portal (DDP), resulting in improved performance and scalability
- Identified and resolved a key performance bottleneck in the Personify user segmentation platform, leading to a notable reduction in processing time
- Enabled efficient, data-driven decision-making processes across the organization, enhancing overall operational efficiency
- Tech Stack: Java, Spring, Redshift, MySQL, AWS, Tomcat, Jersey, MemSQL, Redis

## Education

---

**IIT Delhi**, B. Tech. in Computer Science and Engineering – New Delhi, India Aug 2013 – July 2017

- Gold Medalist for Best BTech Project in Entrepreneurship
- Admin of Byld (SDE Club)
- SysAdmin TA for Data Center and R&D infrastructure
- Teaching Assistant for Introduction to Programming '14 & '15

## Projects

---

### **iJewel Studio (Pixotronics)**

2023-11 - Present

- Developed a comprehensive platform for jewelry designers to upload, optimize, and render 3D models, integrating photorealistic rendering to enhance user engagement
- Implemented Blender-based pipelines for automatic 3D model optimization and an asynchronous job queue system for efficient processing
- Created robust backend services and DevOps pipelines to ensure high performance and scalability
- Tech Stack: Next.js, React, Supabase, PostgreSQL, TypeScript, Python, Cloudflare Workers, Docker, WebGi, Blender

### **SquareCubed**

2023-10 - 2023-11

- Developed an AI-assisted virtual showroom experience specifically for Square e-commerce stores
- Implemented a scalable backend architecture to handle real-time AI interactions and 3D model rendering
- Integrated seamlessly with Square's APIs to provide a cohesive experience for store owners and customers
- Winner of Square + Google AI Hackathon 2023 in "Best reinvention or unification of in-person and online experiences" category
- Tech Stack: Google Vertex AI, Svelte, Next.js, WebGi SDK, Square APIs, Cloudflare Workers, Node.js, Python

## Skills

---

**Languages:** Python, JavaScript, Bash, Ruby, SQL, Java, C, Golang

**Databases:** PostgreSQL, MySQL, MongoDB, SQLite, Redshift, MemSQL

**Frameworks:** Rails, Django, FastAPI, Flask, React, Next.js, SvelteKit, Spring Boot

**DevOps & Cloud:** Puppet, Ansible, Docker, Kubernetes, AWS, GCP, Azure, Terraform, Helm, StackStorm, HTCondor, Slurm

**Monitoring & Analytics:** ELK Stack, InfluxDB, Graphite, Grafana

**Core Competencies:** Software Design, Distributed Computing, Scalable Architecture, Performance Optimization, DevOps & Cloud Infrastructure, Data Analytics, Asynchronous Systems, Intuitive UI/UX, Auto-scaling, Extendable Systems, Reusable Code, Modular Design, Concurrent Processing, Cost-effective Solutions, Highly Available Systems, Resilient Architecture, Well-tested Systems, CI/CD, Test-Driven Development, Multi-threading, Real-time Processing

**Other:** JIRA, Agile Methodologies, Collaboration, Communication, Adaptability, Innovation, Mentoring, Problem-Solving, Critical Thinking