Vasu Bansal

Double Major - Mechanical Engineering · Aerospace Engineering · Indian Institute of Technology Kanpur

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EXPERIENCE

• MTS-3, Nutanix

May '25 - Presemt

NDB - R & D: Security and SQL Server

- Solving bugs and underwent lateral hire bootcamp.

• SDE L2, GoTo Financial (Gojek)

June '22 - May '25

FinTech - Data Products & Infra Engineering - OneKYC (Backend - Java, Golang)

- GCS Cloud Optimization Resulted in 25% reduction in GCS costs.
 - ♦ **Kubernetes Resource Efficiency**: Analyzed and adjusted CPU and memory requests and limits for various services running in Kubernetes
 - ⋄ JVM fine-tuning: Fine-tuned JAVA_OPTS parameters to optimize old-generation garbage collection, resulting in more efficient memory utilization and reduced latency.
- Partner Initiatives Entities which use our KYC process
 - ♦ Onboarded Gojek Driver, Vehicle Financing, Offline Merchants as partners
 - ♦ Cross-data pollination between Cashloan and Cicil
- PII Encryption For multiple services and respective databases
 - ♦ Planned **DB migrations** and dealt with edge-cases due to legacy data
 - ♦ Developed asynchronous workers for encryption and consistency jobs
- Analytics Service Uploading log data resulting in easier debugging
 - ♦ Generates on-demand presigned URLs for uploading data to GCS
 - ♦ Integrated Kafka events for BI consumption and data retrieval
- Dedupe automation → 12%↑ in automation rate and 50%↓ in p90 SLA
- Developed an adapter to serve as an entry point for on-demand services
- Actively debugged production cases as part of Fraud prevention

• Analyst, Deloitte USI

June '21 – June '22

 $Project\ CogSpend\ \hbox{--}\ Supply\ Chain}\ \ \ \ \textit{Network}\ \ Operations$

- Automated file downloading for CogSpend database using **Python script**
- $-\,$ Feature development in Springboot as per client requirements with unit-tests

Projects

Homelab

April '24 - Present

 $Self\ motivated\ project\ -\ Work\ In\ Progress$

- Self-hosting various services on Synology DS-923+ and RaspberryPi
 - ♦ **Tailscale** as private VPN to connect devices and servers securely.
 - ♦ **Adguard** for DNS blocking, **Vaultwarden** as password manger.
 - ♦ **Immich** as private photo backup and cloud service.
 - \diamond ${\bf Portainer}$ for container management, ${\bf Proxmox}$ for Virtual Environment.
 - ♦ Prometheus, Grafana, NodeExporter, cAdvisor for monitoring.

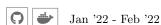
• Inventory Management

Jan '23 - Feb '23

 $Self\ motivated\ project\ -\ MySQL,\ MongoDB$

- Containerized Springboot micro-service project for self-learning
- Implemented various modern micro-service paradigms listed below:
 - ♦ Inter-service communication, fault-tolerance using Resilience4J
 - ♦ Service discovery using Eureka and API Gateway using Spring Cloud
 - ♦ Authentication and authorization using **Keycloak**
 - ♦ Distributed tracing using **Sleuth and Zipkin**
 - ♦ Kafka message queues, ELK stack for logs, Prometheus for monitoring

• Backend for FoodApp Website



Self motivated project - NodeJS, MongoDB

- Monolithic backend application in which users can buy, review food plans.
- Implemented authentication and authorization using **bcrypt** and **JWT**
- Used **Nodemailer** API for forget password and **Stripe** API for payments

• Instagram Clone

• IMDB Clone

• NEAT Self driving car



Feb '21 - April '21

G July '21 - Aug '21

EDUCATION

- IIT Kanpur July '16 July '21 B. Tech. — CGPA - 7.8/10
- St. Kabir Convent School March '16 AISSCE — CBSE Class XII — 88.4%
- St. Xavier's School March '14

 AISSE CBSE Class X 10 CGPA

ACADEMIC ACHIEVEMENTS

- Awarded Academic Excellence Award for outstanding performance in 4th year at IIT Kanpur.
- JEE Advanced 2016: **AIR 1033**
- Qualified **RMO** and attended state-level workshop for INMO^a 2015.
- NSTSE^b 2014: State Rank 56

TECHNICAL SKILLS

- Programming Languages: Java, Golang, C++, Python, Bash
- Tech Stack:

Springboot(Java), Ruby on Rails, Node.JS, React.JS

• Software and Utilities:

PostgreSQL, Kafka, Redis, Docker, Kubernetes, Istio, ElasticSearch, Git, gRPC, Postman

LINKS

• Active on Leetcode, Codechef (3⋆), Codeforces (Rating - 1165)

RELEVANT COURSES

- Data Structures & Optimization Algorithms Theory
- Machine Learning
- Autonomous Navigation
- Advanced Statistical Methods
- Robot Manipulators
- Numerical Methods
- Robot Motion Planning
- Finite Element Methods

Online Courses:

- Completed HTTP Server, DNS server and BitTorrent client challenges in Go on Codecrafters
- Deep Learning Specialization (Coursera)

 $[^]a_{\cdot}$ Indian National Mathematics Olympiad

^b National Science Talent Search Examination