Bhavuk Kalra

Portfolio: bhavukkalra.github.io Github: github.com/bhavukka

LinkedIn: linkedin.com/in/bhavuk-kalra-256b67151/

EXPERIENCE

J.P Morgan Chase and Co.

In Office

June 2021 - Present

Contact: +91-82641-71522

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Senior Software Engineer (Full-Time)

- Modernized cloud infrastructure: Led the migration of on-prem batch systems to AWS-based solutions, processing 3.6M+ records/day with Databricks and SpringBoot, boosting ingestion speed by 40%, and cutting DBU costs by 35across multiple production workloads, cutting DBU consumption by 35% and delivering \$100K+ annual cost savings.
- Optimized production workloads: Improved containerized microservices by fine-tuning Kubernetes pods and Databricks clusters, achieving 35% compute reduction through efficient resource management and Terraform-based orchestration.
- Developed scalable RESTful APIs: Built and maintained high-throughput backend services using Spring Framework, AWS (DynamoDB, SQS, SNS), and Terraform, improving ETL pipeline performance by 50% for production-scale use cases.
- Mentored junior developers: Conducted code reviews, design sessions, and onboarding walkthroughs to foster a collaborative, high-quality engineering culture.
- TechStack: Java, SpringBoot, Hibernate, AWS (DynamoDB, SQS, SNS, EC2), Databricks, Terraform, Docker, Kubernetes, React.js, SQL

Hoppscotch India Pvt. Ltd.[LINK]

Remote

Software Developer (Internship)

March 2021 - June 2021

- **Developed multi-platform applications**: Contributed to the launch of Coinbase in India by building accessible cryptocurrency solutions for web, iOS, and Android platforms, enhancing user engagement by 30%.
- Optimized real-time application performance: Designed systems to deliver high-frequency, low-latency updates, improving transaction processing speed by 25% and minimizing user wait times.
- Collaborated on cross-functional teams: Worked closely with engineers, designers, and product managers to translate technical vision into actionable roadmaps, ensuring project alignment and timely delivery across departments.
- Wrote high-quality tested code: Implemented rigorous testing protocols for developed software, achieving a 95% code coverage rate and reducing bug reports post-launch by 50%.
- \circ Fostered a culture of feedback and growth: Actively sought and provided constructive feedback within team settings, contributing to a 20% increase in collective team productivity and personal development.
- Enhanced security protocols: Implemented advanced security measures for fraud prevention in systems, safeguarding user data and reducing exposure to security threats by 40%.
- o TechStack: Golang, MongoDB, AWS, Docker, Postgres, Ruby, Rails, React Native

TECHNICAL PUBLICATIONS

- Generalized Agent for Solving Higher Board States of Tic Tac Toe Using RL in IEEE PDGC-2022[LINK]
- Advanced Regex-Optimized Framework for Large Scale Data Quality Assurance

EDUCATION

Thapar Institute of Engineering and Technology

Punjab, India

Bachelor of Engineering - Computer Engineering;

2018 - 2022

Projects

- **Password Management System[LINK]**: A MERN stack based online Password Management Portal
 - 1. Enterprise-grade backend: Designed RESTful services in Node.js with JWT and 2FA integration using AWS SES, following security-first design and Terraform-based provisioning.
 - 2. End-to-end testing and CI/CD: Implemented TDD using Jest and Cypress, with automated deployment via Docker and GitHub Actions for consistent feature delivery.
 - 3. Role-based access control: Managed CRUD operations on MongoDB with schema validation and session handling, supporting multi-user roles and audit-ready logs.
- **Poll Taker App[LINK]**: Online Poll taker App build upon MERN stack
 - 1. Microservice architecture: Built containerized backend services with RESTful APIs and real-time vote visualization using ChartJS; deployed with Kubernetes for scalable rollout.
 - 2. Infrastructure-as-Code: Managed CI pipelines and environment config using Docker and Kubernetes, with potential extensions to Terraform for full IaC integration.
 - 3. Tech Stack: Node.js, MongoDB, React, Redux, Docker, Kubernetes, ChartJS, Jest

AWARDS AND CERTIFICATIONS

- Runner's-up at JP Morgan's Code for Good Hackathon
- AWS Certified Developer Associate
- Hacky New Year Hackathon Winner organized by MLH