Shubham Mathur

+91-9443129941 · shubham.mathur.wrk@gmail.com · linkedin.com/in/shubham-mathur-biz
github.com/googleknight · https://googleknight.github.io/

Work Experience

Senior Software Engineer *Jan 2024 - Jan 2026*
Vimeo Remote, India

- **Strategic Compliance (Age Assurance):** Led cross-platform compliance strategy for **4.5M+ users** under the **UK Online Safety Act** and EU DSA, mitigating revenue risks (10% of global turnover). Engineered a **Zero-Trust architecture** that eliminates SPI persistence via vendor-edge filtering, reducing GDPR liability by **100%**. Designed "Exemption Workflows" to bypass verification for premium users, safeguarding high-value revenue streams from churn.
- **Legacy Modernization Architecture (Identity):** Designed the architectural blueprint for "Anumati," a **Golang** microservice to decouple authentication from the legacy PHP monolith. Reverse-engineered 15 years of undocumented logic to map the **Strangler Pattern** migration strategy and implemented core pre/post-login flows to prepare for system decomposition.
- **Backend Scaling (User Deactivation Engine):** Re-architected the deactivation system using **Domain-Driven Design (DDD)** and **Asynchronous Queueing**. Scaled bulk processing capacity from 4K to **50K+ accounts** per batch, resolving HTTP timeouts. Reduced processing time by **99.9%** (2 days to under 5 mins) and reconciled **195K+** inconsistent records.
- **Security & Observability:** Identified a critical MFA bypass flaw and **authored the design specification** for a Backup Recovery Code system. Hardened auth flows against XSS and Open Redirect vectors. Defined **SLOs**, instrumented Grafana dashboards achieving **0%** data inconsistencies, and authored source-of-truth **technical specifications** for Compliance and Auth domains.

Engineer 2 *Nov 2021 - Jan 2024*
McKinsey & Company Bengaluru, India

- Architected **GenAI-powered backend services** for enterprise banking IVR, designing secure OpenAI integration layers with PII redaction and stateful conversation orchestration using **NestJS**.
- Built **event-driven medication adherence platform** using **Azure Functions and Twilio**, implementing fault-tolerant message routing and scheduling flows with **HIPAA-compliant** healthcare data handling at scale.
- Optimized **NestJS microservices** serving **500K+ monthly users**, reducing API response times by **50%** through caching and index optimization. Led architecture reviews, mentored 4 engineers, established API design standards, and drove CI/CD adoption across teams.

Engineer 1 *Jul 2018 - Nov 2021*
McKinsey & Company Bengaluru, India

- Designed **microservices architecture** for Malaysian banking self-service platform serving **20M+ customers**, decomposing legacy SOAP integrations into **REST-based services**. Increased relationship manager productivity by **60%** through workflow automation and API modernization.
- Developed **insurance recommendation engine** for **1.3M users** using React and Node.js, improving operational efficiency by **90%**. Built telecom customer platforms for **10M users**, increasing test coverage by **40%** and strengthening session management reliability.

Education

Vellore Institute of Technology *2018*
Bachelor of Technology, Information Technology Vellore, India

Skills

Languages: JavaScript, TypeScript, SQL; **Familiar:** Go (Golang), PHP, Java, Python

Frontend: React, Next.js, Tailwind, Web Security (CSP/XSS), Jest

Backend: Node.js, NestJS, Express.js; **Familiar:** Spring Boot, FastAPI

Databases: PostgreSQL, MySQL, Redis, MongoDB; TypeORM

Cloud & DevOps: Docker, GitHub Actions, CircleCI; **Familiar:** AWS, Azure, GCP, Kubernetes, Grafana

Architecture: Microservices, DDD, Event-Driven, REST, GraphQL, gRPC, OAuth 2.0, Async Processing, Message Queues

Open Source: Contributed to Apple/password-manager-resources, Wise/PipelineWise, Reactive Resume (PRs merged)