EXPERIENCE

Bitmosys Full-time

Backend Developer Feb 2024 - Present

o Backend System Design:

- * Designed database schema and architectural diagrams and tech stack for a ERP app.
- * Researched and presented findings on various self managed OSS and SaaS based options for database, observability, object storage, cloud providers, authentication, email and disaster recovery strategies.
- * Wrote the foundation code, establish coding guidelines and setup CI/CD for the frontend and backend code base.

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May 2022 - Jun 2023

Observability:

- * Built self managed observability stack using Loki, Grafana, Prometheus, Jaeger and Uptime-Kuma.
- * Build logging and tracing service to capture and send logs and traces.
- * Built dashboard in Grafana to visualize data from these sources.
- * Set up monitoring and alerting using Uptime-Kuma and Alertmanager with an escalation chain.

• Reporting:

- * Built a service for generating and send itemized billing for client at end of every month.
- * Built a service for generate per client usage reports for storage, egress/ingress for better pricing strategy.

o Deployment:

- * Deployed the said monitoring stack with appropriate level of scaling and retention.
- * Deployed a Postgres cluster with high availability replication, backups and logging.
- * Deployed a Redis cluster with high availability for storing ACL.
- * Deployed a Nginx as API gateway with cert manager for SSL connection.
- * Deployed a Linkerd service mesh for monitoring inter-pod latency and securing inter-pod traffic with mTLS.
- * Deployed all APIs with horizontal pod auto scaling.

o Devlopment:

Fullstack Developer

- * Built APIs and CRUD endpoints using NestJS following best coding practises.
- * Introduced practise of documenting and diagramming important parts of the project.
- * Built a service for sending emails with retry logic and recording the mail for archival purpose.
- * Built a cluster wide distributed rate limiter for preventing abuse of resources.
- * Build service for asynchronously generating, storing and mailing various types of pdf documents.

Cango Freelance
Fullstack Developer Nov 2023 - Sept 2024

- Component Library: Built an reusable component library with over 25 components from a new design system.
- Dashboards: Built dashboards with said UI components for users with varying permission levels
- Form builder: Built a google forms like form builder to capture survey response from voters.
- Data Visualization: Build dashboard using Apache ECharts to visualize the responses captured from the said surveys.
- Refactor: Refactored legacy code to typescript following best practises for type safety.
- Optimizations: Reduced over fetching and fetching states with React Query.

Talent Exploriz
Freelance

o Frontend: Built frontend for a event management app using React, Typescript, Tailwind CSS

- Backend: Built a fully functional backend with JWT based authentication and using Typescript, NodeJS
- o Deployment: Deployed front-end using AWS Amplify and back-end using EC2

Matrice AI
Full-time
Frontend Developer

Jun 2022 - Jun 2023

- Landing Page: Built a landing page with interaction based animations using NextJS that loads under 400 ms
- **Dashboard**: Refactored the dashboard for data annotation, training and inference platform using React according new UI designs.
- o Data Labeling Platform: Built back-end for image annotation platform and deployed it in AWS.

TECHNICAL SKILLS

- o Languages: Typescript, JavaScript, Python, Go, SQL
- o Backend: NodeJS, NestJS, ExpressJS, Keycloak, Nginx, MinIO
- o **ORM:** Prisma, TypeORM, Mongoose
- o Database: MongoDB, PostgreSQL, MySQL, Redis
- o Observability: Prometheus, Grafana, Loki, OpenTelemetry
- o Cloud: AWS, Digital Ocean, Linode, Vercel
- o Frontend: React, NextJS, React-Query, Zustand, Astro, ECharts
- o Styling: Tailwind, Shaden, CSS
- o Other: Git, Linux, Docker, Kubernetes, Helm, GitHub Actions

EDUCATION

Kantipur Engineering College
Bachelor on Computer Engineering

Kathmandu, Nepal 2018 - 2022