



Kumang Subba

Software Engineer

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SUMMARY

Detail-oriented Software Engineer and IT professional with experience across application development, systems support, and infrastructure. Strong foundation in backend and full-stack development, system troubleshooting, and operational reliability. Experienced in building scalable services, containerized environments, and automation pipelines, as well as providing hands-on IT support in production environments. Adept at collaborating with technical and non-technical stakeholders to deliver secure, performant, and maintainable solutions.

TECHNICAL SKILLS

- **Programming Languages** - JavaScript, TypeScript, Golang, C, C++, Python
- **Backend & APIs** - Node.js, NestJS, Express.js, REST, GraphQL, gRPC, Middleware, JWT, OAuth2, OpenID Connect, bcrypt, RBAC, Validation, Error Handling, Structured Logging
- **Frontend & Mobile Development** - React, React Native, Expo, Component Architecture, State Management, Client-Side Caching
- **Networking & Distributed Systems** - TCP/IP, UDP, HTTP/HTTPS, TLS, Sockets, epoll, Async I/O, DNS, Reverse Proxy, Load Balancing, Service Discovery, Rate Limiting
- **Systems & Operating Systems** - Linux, POSIX, Processes, Threads, File Systems, Signals, Memory Management
- **Cloud & DevOps** - Docker, Docker Compose, Container Networking, Traefik, Nginx, GitHub Actions, CI/CD, Terraform, Infrastructure as Code, Azure, AWS, IAM, VPC, Kubernetes, Helm
- **Databases & Data Systems** - MySQL, PostgreSQL, MongoDB Atlas, Redis, Indexing, Transactions, ACID, Query Optimization, Replication, Backups
- **Observability & Reliability** - Sentry, Prometheus, Grafana, Metrics, Logging, Tracing, Alerting, SLI/SLO, Incident Response
- **Observability, Reliability & Security** - Sentry, Monitoring, Logging, Profiling, Authentication, Authorization, Secure API Design
- **Dev Practices & Tooling** - Git, GitHub, Trunk-Based Development, Code Reviews, Make, CMake, Neovim, ESLint, Prettier

PROFESSIONAL EXPERIENCE

Software Engineer, Vesko Oy

Jan 2024 - Current

- Architected and extended backend services with TypeScript, Node.js (NestJS), and Azure Communication Services for real-time chat.
- Optimized performance by refactoring redundant network requests, improving response times.
- Designed and maintained Dockerized backend infrastructure with Traefik on Azure.
- Built automated CI/CD pipelines using GitHub Actions for testing and deployment.
- Implemented observability with Sentry, reducing incident resolution time.
- Participated in code reviews and architecture discussions, promoting best practices.
- Integrated secure APIs and real-time services into production systems.
- Ensured reliability, scalability, and maintainability across backend services.

Application Developer Intern, Kesko Oy

Jul 2023 – Dec 2023

- Developed warehouse tracking app with React Native (Expo).
- Built Node.js backend with MongoDB, JWT authentication, and role-based access.
- Collaborated with staff to translate requirements into features.
- Improved app stability, usability, and data integrity.

IT Support, Kang Hydropower Company Pvt. Ltd

Aug 2020 – Nov 2022

- Provided Level 1 & 2 IT support for hardware, software, and OS issues.
- Installed and maintained desktops, laptops, printers, and peripherals.
- Managed user accounts and access control.
- Troubleshoot Windows OS, applications, and network issues.
- Documented recurring problems to improve support efficiency.

PERSONAL PROJECTS

Reverse Proxy

- Engineered a reverse proxy from scratch in C using the epoll API on Linux.
- Implemented Round Robin load balancing to distribute incoming traffic across multiple backend servers.
- Gained hands-on experience with low-level networking, concurrency, and performance-oriented system design

EDUCATION

Bachelor of Business Administration in IT, Major in Developing Digital Services

2023 - Present

Laurea University of Applied Sciences

REFERENCE

References available upon request.