

Bhavya Kandhari

bhavya.kandhari.eng@gmail.com | (602) 574 5915 | bhavyakandhari.vercel.app | linkedin.com/in/kandharibhavya

Education

Arizona State University – MS in Computer Science, GPA: 3.93/4.00

August 2023 – May 2025

Amity University Noida – BTech in Computer Science, GPA: 8.17/10

August 2017 – May 2021

Skills Summary

Languages: Rust, JavaScript, TypeScript, Golang, Python, SQL

Frameworks & Libraries: HTML, CSS, React.js, Next.js, TailwindCSS, Node.js, Express.js, FastAPI, Warp

Cloud & DevOps: AWS, Docker, Kubernetes, Git/GitHub, Linux, GitHub Actions, Prometheus, Grafana

Databases & Tools: PostgreSQL, MySQL, BoltDB, Redis, Power BI, Tableau, AWS QuickSight

Skills: Agile, Version Control, Microservices, Distributed Systems, Scalability, Fault Tolerance, Observability

Experience

Software Engineer, Ira A Fulton Schools of Engineering – Tempe, AZ

June 2024 – April 2025

- Engineered Python and C# automation tools to streamline evaluation of 400+ distributed computing projects per semester, improving workflow efficiency and system reliability.
- Designed Pytest-based validation pipelines to test correctness, runtime performance, and edge-case resilience across 200+ submissions, enabling scalable quality assurance and fault-tolerant execution.
- Led debugging sessions and architecture walkthroughs on RESTful APIs and distributed systems, emphasizing scalability, system design, observability, and best practices in cloud-native backend development.

Associate Software Engineer, Ernst & Young (EY), GDS – Kolkata, India

September 2021 – July 2023

- Accelerated daily IP enrichment by orchestrating AWS Redshift, Glue, Lambda, and Secrets Manager, optimizing data pipelines and reducing processing latency by 1.5 hours.
- Developed anomaly detection on upstream Qualys vulnerability data by applying the IQR method in Redshift over a 30-day window, and visualized results in QuickSight dashboards, improving detection accuracy by 20%.
- Engineered large-scale, fault-tolerant ETL pipelines on AWS Glue for 50M+ daily records and developed QuickSight dashboards for high-availability monitoring.
- Built a PySpark Glue job PoC applying K-Means clustering on 10M+ vulnerability records, grouping findings by remediation tactic to streamline large-scale remediation.
- Automated CVE enrichment by orchestrating AWS Glue jobs triggered on upstream NVD data refresh, mapping 65% of CVEs to CAPEC attack patterns for stronger enterprise threat detection.

Projects

URL Shortener Webapp

<https://hash-ly.vercel.app/>

- Built full-stack web app with Next.js 15, TypeScript, and Turso, exposing REST APIs on edge infrastructure.
- Secured app with IP hashing, Upstash Redis rate limiting, SSRF protection, 30-day retention and analytics.
- Deployed on Vercel with CI/CD workflows, consolidating microservices into a unified Next.js edge architecture.

Metered API Server

github.com/bkandh30/metered-api-server

- Built a secure Rust API server with Warp, Tokio, SQLx, API key management, and PostgreSQL usage tracking.
- Implemented quotas, logging, and rate limiting; deployed via Docker Compose for scalable microservices.
- Applied best practices: structured logging, health checks, endpoint metrics, and CI/CD with GitHub Actions.

GoFlix - RESTful Movie API

github.com/bkandh30/GoFlix

- Architected Golang REST API with JWT auth; supported 100+ concurrent users with high availability.
- Integrated PostgreSQL, database migrations, secure password storage, error handling, and graceful shutdown.
- Implemented CORS, structured logging, background workers, and metrics for observability at /debug/vars.