Bibesh “Kumar” Timalsina

San Marcos, Texas 78666 | 737-213-2048 | timalsinabibesh747@gmail.com | Open to Relocation

LinkedIn | GitHub | Website

EDUCATION

Texas State University: College of Science and Engineering — San Marcos, Texas
BS, Computer Science and Data Analytics. — Jan 2024 – Dec 2027

Relevant Coursework:
Software Engineering, Algorithm and Analysis, Machine Learning, Artificial Intelligence, Computer Systems Security, Parallel Programming, Object Oriented Programming, Computer Architecture

EXPERIENCE

Texas State University Libraries - San Marcos, Texas
Systems Support Assistant — Dec 2025 – Present

- Collaborated with two senior software engineers to build Open API specs, controllers and services in a MVC backend for the University Libraries Travel App project used by 100+ library employees; admin feedback measured a ~30% faster processing time for travel requests.
- Built a Continuous Integration (CI) pipeline with linters, dependency checks and 14 unit tests for University Libraries Travel App project.
- Rebuilt a legacy inventory management tool as a web application secured behind TXST’s SSO. The application is built as 4 Docker container services: Nginx Load Balancer, Next.js Frontend, Flask Backend and PostgreSQL database and deployed to TXST’s Red Hat Enterprise Linux server via GitHub Actions CI/CD. This web application reduced departmental onboarding time by ~30% and data duplication errors by ~3%.
- Traced a data duplication error in a live Flask backend server and fixed it using WHERE NOT EXISTS subqueries.
- Built a reusable JWT cookie-based authentication system with a custom Next.js proxy and Argon2 client-side hashing. This system is used by 3 active projects.
- Built four custom reusable error pages (404, 500, 502, 504) for Texas State University Libraries using HTML and Tailwind CSS.

Texas State University Libraries, San Marcos, Texas.
STEM Research Coach — Feb 2024 – Dec 2025

- Coached 700+ students on database search strategy, research paper evaluation and locating peer-reviewed literature for stem coursework and capstone projects.
- Co-authored a Research Coach FAQ with three colleagues in the university libraries CMS for reference and repetitive questions.

PROJECTS

ScrubX: A PHI Scrubbing Gateway for Clinical AI | Typescript, Next.js, Gemini, Research Papers | GitHub | Link — Aug 2026 – Present

- Built a 7-step gateway between clinicians and an LLM that cleans hidden text, catches patient identifiers and prompt-injection attacks, swaps identifiers for placeholder tokens held in a vault that dies with each request, then restores the real strings in the answer.
- Wrote an offline evaluation harness that scores the gateway on 331 labeled identifiers, 2,975 more from the public ASQ-PHI set and 70 attack prompts, plus a CI gate that fails any pull request where a single test item gets worse.
- Wrote 291 tests, including a leak test that fails if any patient value reaches a model prompt, and 18 design decision records.

SightX: A Diabetic Retinopathy Detection System | PyTorch, FastAPI, React, Node.js, Docker, AWS | GitHub | Blog — Feb 2026 – Present

- Trained a ResNet-50 V2 classifier on 35K retinal fundus images on a local Apple M4 with zero cloud compute, then secured the inference with a 108-pass test-time augmentation ensemble and a cost matrix that penalizes false negatives
- Built and deployed a 3-container Docker stack (React, Node.js, FastAPI) to a Red Hat Enterprise Linux Server and Superbase as the database.
- Currently migrating to AWS using AWS CloudFront, Lambda, SQS, RDS, S3, IAM and VPC and testing builds using Local Stack.

GitGud: A Containerized Inventory Platform | Node.js, PostgreSQL, Nginx, Docker, RHEL | GitHub — Dec 2025 – Apr 2026

- Packaged the system into 3 connected container services to prevent environment drift between machines, and secured REST API routes against brute-force and token-reuse attacks with Argon2 hashing plus peppering, JWT auth, and an in-memory token blacklist.
- Wrote a GitHub Actions CI/CD pipeline that runs Jest unit tests on every Pull Request and merge to main.

VOLUNTEERING

Association of Statistics and Analytics Student Club
IT Support and Web Developer | Link | GitHub — Aug 2026 – Present

- Primary developer and maintainer of the club's public website that has four pages covering what ASA is, membership, sign-up, and meeting details.

TECHNICAL SKILLS

Programming Languages	: Python, Java, TypeScript, C++, CUDA, Rust
Frameworks, Libraries & APIs	: React, Next.js, Node.js, Flask, Fast API, REST API’s, WebSocket’s, Open API
Databases	: PostgreSQL, MongoDB, Vector DB
Cloud	: AWS (CloudFront, Lambda, SQS, RDS, S3, IAM, VPC, Bedrock), Vercel, Supabase
Infrastructure & DevOps	: Linux, GitHub Actions, NGINX, Docker, Deployment, Observability
AI/ML	: Pytorch, Model Training, Inference, vLLM, AI Harness
Tools and Practices	: Git, GitHub, Bitbucket, Jira, Postman, Swagger