PARTH GODSE

(812) 553-2820 | parthgod0708@gmail.com | [LinkedIn](#) | [GitHub](#) | Programming Languages: **Python, C, C++**

PROFESSIONAL SUMMARY

Results-driven Software Engineer with hands-on experience building full-stack applications, scalable backends, and cloud-native systems. Proficient in **Python, FastAPI, React, TypeScript, SQL**, and **AWS**, with a track record of improving performance, reducing latency, and delivering reliable, production-ready solutions. Strong collaborator who thrives in fast-paced teams and adapts quickly to new technologies.

EDUCATION

Master of Science in Computer Science | Indiana University Bloomington| GPA: 3.8/4   **Aug 2023 - May 2025**
- Courses: Applied Algorithms, Machine Learning, Data Mining, Elements of AI, Computer Vision.

Bachelor of Technology in Computer Science | MIT WPU | GPA: 3.8/4   **Aug 2019 - May 2023**

TECHNICAL SKILLS

Languages : Python, SQL, JavaScript, TypeScript, C, C++, HTML, CSS, Tailwind
Databases : MySQL, PostgreSQL, Supabase, MongoDB, Firebase, BigQuery, Faiss Vector Database
Frameworks/Tools : Nextjs, Nodejs, FastAPI, Flask, React, Kubernetes, CI/CD, Docker, Git, GitHub, ShadCN
Cloud : AWS(EC2, S3, SageMaker, EMR, Glue, Athena), GCP, PySpark, Hadoop
AI/ML : PyTorch, Tensorflow, Transformers, HuggingFace, LangChain, RAG, OpenCV, NLP, LLMs
Analytics : Power BI, Tableau, QuickSight, A/B Testing, Feature Engineering

WORK EXPERIENCE

Software Engineer   **January 2025 - Present**
CyberInfrastructure for Network Science Center | *Python, OpenCV, NumPy*   Indiana, USA
- **Automated segmentation pipeline** – Built an OpenCV + NumPy system to segment biomedical images, reducing manual effort from hours to minutes. **Scaled processing** to 400k+ images using CUDA + **multithreading**, **cutting runtime** by 40% while preserving image quality via adaptive resizing and aspect-ratio alignment.
- Anatomical visualization system – Developed a Python-based engine to auto-generate **SVG schematics** of organ blood flow from **structured CSV datasets**. Implemented ID normalization, FTU to FTU vascular inference, and custom Matplotlib rendering utilities with **adaptive layouts**, producing **high-resolution, reproducible** biomedical diagrams.

Software Engineer - AI/ML   **July 2024 - November 2024**
Hyphenova | *Python, GenAI, NLP, LLMs, Pytorch, Tensorflow, Docker, Prometheus*   California, USA
- **Improved** transformer model **accuracy 15%** and throughput 10% by containerizing models with **Docker + Flask APIs**, accelerating customer sentiment insights across 5+ business units.
- Launched a **Kubernetes**-based **recommendation engine** with Prometheus/Grafana monitoring, achieving a **20% boost** in personalization efficiency and **25% higher monitoring** accuracy.

Software Engineer   **March 2022 - June 2022**
CanspiritAI | *Linux, Python, TensorFlow, OpenCV, Kubernetes, Kubeedge, Docker*   Pune, India
- Delivered 90% detection accuracy by implementing an end-to-end DETR **object detection** pipeline with a **ResNet** backbone.
- Configured **KubeEdge** clusters on **WSL** with **Kubernetes** for deploying lightweight AI models to Edge devices, enabling 81% model accuracy with **minimal latency**.
- **Optimized Docker** image builds and deployment scripts, **reducing inference response time** by 15% across platforms.

PROJECTS

LiveSync Kanban Dashboard | *Python, Node.js, React, Supabase, Tailwind, CI/CD, TypeScript*
- Built a real-time Kanban board using **React** vite with drag-and-drop tasks and Supabase sync, boosting **workflow clarity** by 40% and cutting task update latency 30%.
- **Automated task reminders** with scheduled triggers, increasing completion rates by 25%, and integrated Vercel **CI/CD** pipelines for zero-touch deployments.
- Designed a modern, **responsive UI** with Tailwind, improving usability and boosting **user engagement** by 50% in testing.

Graph-Based Workflow Management System | *Next.js, TypeScript, Prisma, PostgreSQL, Tailwind, Pexels API, SVG*
- Engineered a full-stack task management system with **Prisma ORM + PostgreSQL**, supporting metadata storage, **dependency links**, and media integration.
- Implemented a dependency engine using **Kahn's algorithm** and Critical Path Method (CPM) scheduling to compute ES/EF/Slack, prevent cycles, and **identify critical** tasks.
- Built an **interactive SVG dependency graph** with auto-layering, arrowheads, and critical path highlighting, enabling **real-time** project timeline visualization.

Amazon Reviews Big Data Analytics | *AWS (EC2, S3, SageMaker, QuickSight), PySpark, XGBoost*
- Built a PySpark ETL pipeline on **EC2 Spot Instances**, improving processing speed by 40% and cutting compute costs by 30%.
- Automated machine learning model training in **SageMaker Autopilot** (achieved 93% accuracy with XGBoost) and delivered **QuickSight dashboards** adopted by 20+ stakeholders.
- Implemented secure IAM and VPC policies, reducing S3 storage costs by 20% monthly and improving overall infrastructure security.

Automated Daily News Briefing Agent | *Python, LangChain, Gemini, GCP, GitHub Actions, RAG*
- Built a Python agent that ingests top headlines via NewsAPI, summarizes with **Google Gemini** on **GCP**, and applies fact-checking through DuckDuckGo search and LLM verification, outputting verdicts with URL citations.
- Designed the workflow as a **LangGraph StateGraph** with Judgeval callbacks to evaluate relevancy and faithfulness at each node.
- Automated daily distribution using **GitHub Actions (cron, secrets)** and secure SMTP email delivery, ensuring 100% uptime.