

# Akhilesh M T

📍 Bangalore, India

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## Summary

I am a backend engineer passionate about designing and developing scalable systems. With a focus on automating processes, I leverage the latest technologies to create reliable and efficient backend solutions.

## Technical Skills

- **Programming Languages:** Python, JavaScript
- **Frameworks and Tools:** FastAPI, Express.js, Docker, RabbitMQ, Celery, Pandas
- **Databases:** PostgreSQL, SQLite, MongoDB
- **Cloud Services:** Virtual Machines, Linux, Serverless Architectures

## Professional Experience

**Backend Engineer, Trigeminal AI**  
Bangalore, India

Jan 2024 – Present

- Developed and maintained backend systems for processing large-scale medical images, efficiently managing 100+ daily image uploads (each 700MB).
- Integrated Redis to support real-time notifications as offline cache and optimized backend performance, reducing server load by 30%.
- Automated and streamlined image upload pipelines using Celery and Watchdog, reducing manual intervention by 50%.
- Integrated open-source image servers like OHIF and OpenSeaDragon to handle various medical imaging formats seamlessly.

## Projects

- **Medical Image Management System:** Built a robust backend system for processing and storing medical images, improving workflow efficiency by handling daily uploads of large image files.
- **Sales Forecasting Tool:** Developed a predictive analytics system to forecast product demand based on historical sales data, optimizing inventory management.
- **Digital Asset Management Platform:** Designed a scalable platform for managing and retrieving digital assets efficiently.
- **Lab Information Management System:** Integrated CRM functionalities into a lab information system to streamline patient data and sample tracking.
- **Automated Image Upload Service:** Created an automated image upload pipeline, reducing developer workload by 50% and improving system scalability with Docker and Celery.
- **FastAPI Hosting Utility:** Developed a command-line tool to deploy FastAPI applications using systemd, NGINX, and SSL for secure, scalable hosting.

## Education

**B.Tech in Electronics and Communication Engineering,** APJ Abdul Kalam Technological University  
CGPA: 7.56

Jul 2023