

# OM VAIRAGADE

Agentic AI developer & architect | Innovation specialist

Founder – Emper.ai

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## EDUCATION

### YCCE College of Engineering

- Bachelor of Engineering in Information Technology
- 2019 – 2023
- CGPA – 7.82
- Electives: Cloud Computing, Salesforce, Business Intelligence
- (Tableau)

## SKILLS

- AI /LLMs:** openAI models, fine tuning and training , Azure ai foundry, local LLMs and their selection, SLMs, Prompt Engineering, API integrations, Agentic Workflows
- Data & Analytics:** Databricks, CSV Mapping, ThreadPoolExecutor, Retry Logic, parallel processing
- Languages & Tools:** Python, SQL, Java, Azure Load Balancer, Azure Runbooks, Azure backup and recovery, vertical & horizontal scaling, RTSP, VNet, NSG, Logic Apps

## EXPERTISE (What I offer)

- Innovation:** creation of entirely new AI models, tools, or features from scratch – no limits to imagination or execution
- Quickest Solutions:** Instant logical reflexes to solve complex problems within seconds of hearing the use case
- Initiative for New Ideas:** Proactively suggestions for powerful improvements, automations, and features – even before being asked
- Continuous Upgradation:** exploration and adaptation of the latest tools and frameworks (e.g., n8n, Replit Agents, SlideSpeak)
- Integration:** Turning any software, hardware, or infra into an AI-based system

## CERTIFICATION

- Microsoft Certified: Azure Fundamentals – AZ-900 | Jan 2025

## ABOUT ME

AI Innovator and Architect specializing in agentic AI systems that think, act, and evolve autonomously. Experienced in developing enterprise-grade intelligent products – from smart CCTV and hiring automation to large-scale AI data processors and infrastructure security models. Expert in designing agentic AI systems that merge software, hardware, and automation – building real-time intelligent models that think, act, and scale independently. Known for developing complete AI ecosystems single-handedly – from architecture to live deployment.

## WORK EXPERIENCE & PROJECTS

### AI Developer – TCS, AI.Cloud Team ,Tata Consultancy Services, Nagpur (FEB 2023 – PRESENT)

- Key member of AI.Cloud initiative delivering enterprise-grade AI + cloud automation tools.
- Built and deployed intelligent systems using OpenAI, Azure infrastructure, and Databricks.
- Spearheaded multiple projects that improved cost-efficiency, security, and automation across diverse enterprise use cases.

### Founder – Emper.ai

(JAN 2024 – JULY 2024)

- Founded an AI venture building autonomous agentic systems merging cloud, hardware, and ai automation – independently built and launched all products end-to-end.
- Created Emper CCTV – an AI surveillance system analyzing RTSP feeds in real time to send smart Telegram alerts (sleeping guard, unattended bag, crowded zone).
- Built Naukrizz – a GPT-driven hiring platform interpreting natural-language job prompts (“I need a cook who can also manage groceries for ₹7k”) to generate precise AI matches.

## AI MODELS MADE: (INDIVIDUALLY - END TO END)

**1. Emper CCTV (Breakthrough Product – Emper.ai)** – World’s first AI-powered smart surveillance system analyzing RTSP camera feeds in real time and triggering custom Telegram alerts (sleeping guard, unattended bag, crowded zone). Built from scratch with GPT-4.1 Nano and compressed image pipelines for <2 s alert response. Deployed via Flask on Azure VM, integrated with Tailscale + Termux for remote camera access.

**2. Naukrizz (AI Hiring Platform – Emper.ai)** – First-of-its-kind GPT-driven hiring solution connecting skilled and unskilled workers through natural-language prompts (“I need a cook who can also manage groceries for ₹7k”). Designed an autonomous AI engine for query interpretation and SQL-style candidate matching with >90% accuracy and a fully automated workflow.

**3. VM Logs AI Model (Enterprise Security Solution – TCS)** – Strengthened IT infrastructure by analyzing Azure VM logs for anomalies and performance risks, reducing false alerts by 90% and enabling real-time proactive dashboards.

**4. Migration Dependency Analysis (Cloud Automation System – TCS)** – Automated discovery of service dependencies during cloud migrations with three modules: server dependency mapping + AI analysis, app infrastructure mapping, and software inventory assessment. Reduced manual analysis time from 8 hrs to <30 min via parallel GPT processing.

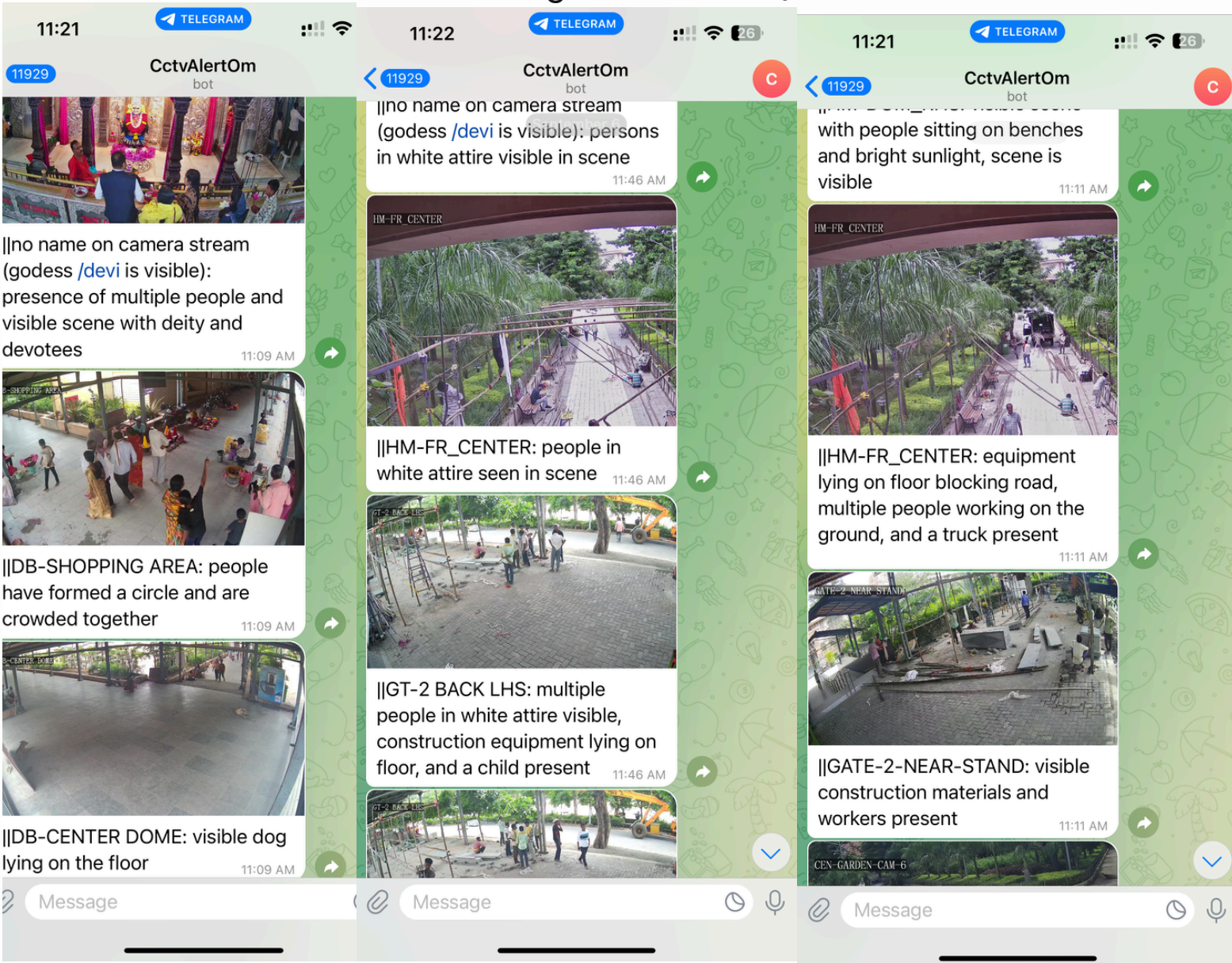
**5. Image Analysis for Cloud Diagrams (Vision Intelligence Tool – TCS)** – GPT-based vision model translating complex cloud architecture diagrams into text summaries for audits and documentation, cutting inference cost by ~60% via token optimization and compression.

**6. Chunk Processor for Large Files (Big Data AI Engine – TCS)** – AI pipeline for processing 100GB+ datasets using Databricks and Logic Apps, achieving 5× faster performance through 8-way parallel GPT inference with retry logic and full data integrity.

**7. ClaimSure (Interactive AI Assistant – TCS Hackathon)** – Streamlit + RAG-based claim assistant enabling natural-language policy Q&A with document-anchored answers, recognized for innovation and deployment potential.

# EMPER.AI MODELS & RESULTS

## 1) Ai based CCTV system (software that integrates to your existing cctv camera)



### These are sample results from the first client (Koradi mandir - Nagpur) (15 days on-site testing)

During a 15-day live pilot at Koradi Mandir (Nagpur), Emper CCTV proved its real-world capability — running 24×7 on local RTSP feeds and instantly alerting security staff via Telegram. The AI model continuously analyzed activities such as:

- Detecting lost children based on described attire (e.g., "child in yellow shirt seen near gate").
- Identifying animals roaming inside restricted mandir premises.
- Flagging unattended equipment or objects left near high-traffic areas.
- Detecting people sitting, sleeping, or lying down in prohibited zones.
- Recognizing crowd build-ups or congestion during peak hours.
- Notifying people in specific attire or color patterns when required for coordination.
- Sending real-time alerts via Telegram with visual evidence and captions for quick staff action.



# EMPER.AI MODELS & RESULTS

2) Naukrizz (job portal for ai based match making system linking business owners and workers on natural language)

## Find or Hire the Right People

Smart AI matching for shop owners and job seekers

🗨️ **Hey Job Seekers**

Tell us what kind of job you're looking for  
e.g. *Cashier in evening shift near Itwari*

Enter your prompt

0 / 300

OR

🏪 **Hey Shop Owners**

Describe the kind of employee you're hiring  
e.g. *Need a part-time delivery boy for weekends*

Enter your prompt

0 / 300

Let's Go

## Find best employees for your business

Active Hiring: ☒

Tell us what kind of employees you are looking for:  
e.g. "I need a delivery boy who knows basic English and owns a bike."

i need employee for my jewellery shop, i only need females as a staff who lives in nagpur, and my budget is 15k rupees per person

129/300

Select Priority

Select Priority

Let's Go

The users (either business owner or Job seeker) writes their prompt/requirements in natural language, and clicks on "let's go" (same as Zomato/swiggy/Ola/uber/etc)

Final Top 10 Matches:

Top 10 matches for your requirements:

- Name: Meena Gavande, Age: 28, City: Nagpur  
Reason: Meena Gavande, with 2 years of receptionist experience and residing in Nagpur, expects a salary of 15,000 INR, matching the employer's location and budget.
- Name: Sonali Nayak, Age: 26, City: Nagpur  
Reason: Sonali Nayak, with her experience as an Accounts Clerk, residing in Nagpur, and a current salary of 10,000 INR, is willing to work within the 15,000 INR budget for a female staff member at your jewelry shop.
- Name: Kavita Yadav, Age: 27, City: Nagpur  
Reason: Kavita Yadav, a female tailor with 2 years of experience living in Nagpur, has a current salary of 9000 INR and is seeking a position within the 15,000 INR budget.
- Name: Rekha Kale, Age: 33, City: Nagpur  
Reason: Rekha Kale, a female resident of Nagpur with 4 years of experience and an expected salary of 15,000 INR, matches the location, gender requirement, and salary budget for your jewelry shop staff.
- Name: Madhuri Gore, Age: 27, City: Nagpur  
Reason: Madhuri Gore, with 3 years of beautician experience, resides in Nagpur and has an expected salary of 15,000 INR, aligning with the shop's location and budget.
- Name: Anjali Rathod, Age: 28, City: Nagpur  
Reason: Anjali Rathod, with 2 years of receptionist experience and residing in Nagpur, expects a salary of 14,000 INR, which exceeds the 15,000 INR budget, but her location and gender match the job requirements.
- Name: Sunita Tiwari, Age: 31, City: Nagpur  
Reason: Sunita Tiwari, with 3 years of customer greeting experience, fluent Hindi, and residing in Nagpur, expects a salary of 15,000 INR, matching your budget and location requirements.
- Name: Divya Sharma, Age: 28, City: Nagpur  
Reason: Divya Sharma, with 2 years of experience in billing and accounts, lives in Nagpur, and has an expected salary of 15,000 INR, matching your location, gender preference, and budget.
- Name: Vandana Sable, Age: 27, City: Nagpur  
Reason: Vandana Sable, a female tailor with 3 years of experience and based in Nagpur, is available within your bud

They get the required candidates (match making according to most matched and ranked results) - ai analysed