

Pallab Saha

✉ pallabsongeet007@gmail.com | ☎ (+91) 90622 51052 | 🌐 pallab-saha-git | in pallab-saha-p7s | 📍 Kolkata, WB, India

PROFESSIONAL SUMMARY

Solution driven AI/ML professional with 4+ years of experience and M.Tech in Robotics and Mobility Systems from IIT Jodhpur. Leading data science initiatives and building intelligent, production-grade systems using Python, Generative AI (Gen AI), and cloud technologies. Specialized in statistical analysis, predictive modeling, and end-to-end development for enterprise AI platforms. Proven track record of collaborating with business stakeholders, driving from proof-of-concept (PoC) development to production , managing a team of 6 and coordinating with cross-functional teams to deliver scalable solutions and generate actionable insights that drive strategic decision-making. Validated by Google Professional ML Engineer and Microsoft Azure AI Engineer (AI-102) certifications. Passionate about applying advanced analytics, artificial intelligence(AI), Computer Vision (CV) and machine learning (ML) to solve real-world business problems.

WORK EXPERIENCE

Sr. Developer at Cognizant Technology Solutions (Kolkata, WB, India)

Apr 2024 - Present4 Y 1 M

- Managed a **6-member analytics team** to build enterprise engagement intelligence and reporting systems for AI platforms, applying statistical analysis and machine learning algorithms to generate actionable insights using **Python, SQL, and Azure ML**.
- Directed the full lifecycle (**discussion → PoC → production**) of a **Reporting & Analytics Module** for a RAG-based IT chatbot, serving **5,000+ enterprise users** and analyzing platform usage generated by **3M+ end-users**.
- Presented analytical outcomes and platform progress to **Directors, Senior Directors, Product Leaders, and Business Analysts**, enabling executive visibility into engagement trends, resolution performance, and system adoption.
- Architected scalable data infrastructure including schema design, automated batch pipelines, and aggregation workflows processing **~5 million conversation records per day**, supporting reliable enterprise-scale analytics and continuous model improvement.
- Designed and deployed end-to-end pipelines for conversation analytics, sentiment analysis, and feedback processing, enabling performance optimization of **LLM-integrated systems**.
- Deployed containerized analytics and ML services using **Docker** and orchestrated workloads via **Kubernetes (AKS)** to ensure scalable, reliable production monitoring and high-availability deployments.
- Implemented **GPT-4-based intelligent summarization** and predictive analytics workflows, prototyping forecasting approaches using **Prophet** and **SARIMA** before productionizing optimized models with **XGBoost** for proactive performance monitoring and trend forecasting.
- Automated reporting workflows through interactive **Matplotlib** and **Plotly** dashboards, reducing manual reporting effort from a **9-member operational process to a single monitoring role**.
- Collaborated with cross-functional teams including **AKS infrastructure, DBA, Performance Testing (PT), and SIT teams**, alongside product and business stakeholders, to deliver scalable analytics and AI capabilities from PoC through production rollout.
- Provided technical solution guidance for the Reporting Module, mentoring and supporting in architecture and implementation decisions, leading to successful production deployment.
- Championed adoption of **AI-assisted software engineering practices** across the team, introducing prompt-driven development workflows (**Copilot, Cursor, Windsurf, Claude Code**) that accelerated backend system delivery by **~80%**, compressing a projected **4-month development cycle into 20 days**.

Programmer Analyst at Cognizant Technology Solutions (Kolkata, WB, India)

Feb 2023 - Mar 2024

- Promoted after one year due to satisfactory performance in technical delivery.

Programmer Analyst Trainee at Cognizant Technology Solutions (Kolkata, WB, India)

Feb 2022 - Jan 2023

- Successfully completed initial training and transitioned into a full-time role.

CERTIFICATIONS

▪ AI-900 Azure AI Fundamentals	Microsoft
▪ AI-102 Azure AI Engineer Associate	Microsoft
▪ Cloud Professional Machine Learning Engineer	Google

EDUCATION

Master of Technology (M.Tech (Full-Time)) Robotics And Mobility Systems(IDRP) Indian Institute Of Technology (IIT) (Jodhpur, Rajasthan, India)	2022 - 2024 CGPA 5.93/10
Bachelor of Technology (B.Tech) Mechanical Engineering Dr. Sudhir Chandra Sur Degree Engineering College (Kolkata, West Bengal India)	2017 - 2021 CGPA: 8.35/10
Senior Secondary (Class XII) Indira Gandhi Memorial High School(CBSE board) (Kolkata, West Bengal India)	2016 Percentage: 62.40%
Secondary (Class X) Julien Day School(CISCE board) (Kolkata, West Bengal India)	2014 Percentage: 85.40%

SKILLS

- Languages & Frameworks: Python, SQL
- Machine Learning & Deep Learning: TensorFlow, PyTorch, Pandas, Numpy
- Data Analysis & Visualization: Pandas, NumPy, Matplotlib, Plotly
- Computer Vision & NLP: Transformers, Azure Cognitive Services (Vision, OCR, Speech, Language), Azure Document Intelligence
- Cloud & MLOps: Azure AI, Azure ML Studio, Azure OpenAI, Azure CLI, GCP (Vertex AI), MLFlow
- Tools & Platforms: Docker, Vertex AI Notebooks, GitHub