# TINTO JAMES T

PRINCIPAL AI ARCHITECT

## CONTACT

📞 **+91-9884259749**

✉ tintojames@outlook.com

🏠 Cochin, Kerala, India

💼 linkedin.com/in/tintojames

## EDUCATION

**M TECH - CSE**    2003-2005
IIT Madras

**AMIE – CSE**    1999-2003
Institution of Engineers (India)

## CERIFICATIONS

**Deeplearing.AI**
Deep Learning Specialization
(5 Courses)

**Microsoft**
Professional Program for Data Science **(**10 Courses)

## PROFESSIONAL OVERVIEW

Strategic **AI Solutions Architect** specializing in **Generative AI**, Deep Learning, Machine Learning**,** Data Engineering**,** and **solution design**. Skilled in building scalable **AI agents**, LLM applications, and cloud ML systems across industries. Adept at transforming emerging technologies into business-ready solutions, delivering high-impact PoCs, and driving AI adoption. **Proven leader** in team collaboration, mentoring, and AI innovation.

## SKILLS

- **AI Strategy & Thought Leadership:** GenAI trends, strategy alignment, team enablement, technical mentoring, and innovation.

- **AI/ML Architecture**: Solution design, model lifecycle, system integration, PoC delivery, scalable deployment, architecture reviews.

- **Generative AI & LLMs**: RAG, LLM fine-tuning, prompt engineering, AI agents (LangChain, CrewAI), Semantic search, LLM evaluation frameworks, Voice Agents, OpenAI, Hugging Face.

- **Machine Learning & Deep Learning**: Classification, regression, clustering, forecasting (Prophet, Holt-Winters), anomaly detection, CNN, RNN, transfer learning, NLP.

- **Libraries & Frameworks**: PyTorch, TensorFlow, Keras, Scikit-learn, NLTK, OpenCV.

- **Cloud & MLOps**: Azure AI Stack, Azure ML, Azure OpenAI, Azure Data Factory, AWS Bedrock, ML pipelines, containerized & API-based deployments, monitoring, automation.

- **Data & Streaming**: SQL Server, SSIS, SSAS, Apache Kafka, Spark, Vector Stores (FAISS, ChromaDB), ETL.

- **Programming & Tools**: Python, SQL, Shell scripting, DAX, Power BI, Streamlit, Git.

## WORK EXPERIENCE

### G10x | Solutions Architect – AI

- Collaborated with clients to define AI needs, develop tailored roadmaps, identify strategic use cases, and deliver solution presentations and demos.

- Leading the design and deployment of LLM-powered **AI agents**, **RAGs**, and Generative AI solutions, leveraging diverse agentic frameworks and commercial LLM providers.

- Enabled rapid AI agent POC development and led the transformation of local LLM applications to scalable cloud-based solutions using FastAPI and React.

- Engineered optimized **instruction fine-tuning** on open-source models with custom datasets, demonstrating superior domain performance over RAG-based approaches.

- Drove the integration of voice agents and **LLM evaluation frameworks**, fostering a culture of evaluation-driven development.

- Mentored engineering teams and conducted **internal enablement workshops** to build strong in-house Generative AI competency at G10x.

- Engaged in active **AI R&D**, exploring autonomous agents, multi-modal transformers, and MCP Servers.

### EY | Assistant Director – AI / ML & Data Lead

- Consistently engaged with senior leadership and collaborated with cross-functional teams to deliver end-to-end analytics and reporting solutions.

- Built and deployed **Azure Machine Learning** models to predict high-priority incidents in real time, from base alerts to improve proactive issue resolution.

- Applied **transformer models** for intelligent incident clustering and classification, enabling improved tracking and enhanced operational efficiency.

- Developed a **RAG** POC leveraging internal knowledge bases and demo video transcripts to enhance contextual AI-driven search and response accuracy.

- Engineered data pipelines using Python and **Azure Data Factory** to ingest and curate data from diverse sources, ensuring seamless delivery to business intelligence tools.

- Designed and developed dynamic Power BI dashboards that translate data into actionable insights, supporting executive decision-making

### SFO Technologies | Senior Technical Specialist

- Designed and deployed AI/ML solutions and end-to-end data pipelines for IoT-driven applications and real-time analytics, bridging roles of ML specialist and data engineering architect.

- Built and deployed deep learning models for **face/object detection**, speech recognition, and **video surveillance** using TensorFlow Object Detection API.

- Developed time series analytics for **anomaly detection, forecasting**, and **predictive maintenance** to anticipate machine failures in IoT environments.

- Implemented Model Predictive Control and architected real-time data platforms using Spark and Kafka for streaming IoT data processing.

Apr **2005** – Sep 2015

### Verizon | Senior Architect (Multiple Roles)

- Progressed from Software Engineer to Senior Architect, developing expertise in data engineering, architecture, and advanced analytics through increasing responsibilities.

- Executed advanced analytics projects including **customer sentiment mining** using Python NLTK for NLP tasks

- Architected and implemented scalable data warehousing solutions, driving centralized storage and efficient management of large-scale transactional data.

- Engineered high-performance ETL pipelines to transform and load data into star schema models, supporting robust analysis and reporting frameworks.

## COURSES & CERTIFICATIONS

- **IBM**  Introduction to Neural Networks and PyTorch

- **IBM**  Deep Learning with PyTorch

- **IBM**  Generative AI & LLMs: Architecture and Data Preparation

- **IBM**  Gen AI Foundational Models for NLP

- **MITX**  The Analytics Edge

- **DATABRICKS** Large Language Models: Application through Production

- **DEEPLEARNING.AI** Calculus for Machine Learning and Data Science

- **UNIVERSITY OF ALBERTA**  Fundamentals of Reinforcement Learning

## AWARDS

- Multiple EY SPOT & **Significant Contribution** awards for exceptional performance.
- Certificate for **Excellence** awarded by Verizon US Senior Vice President.
- Multiple Verizon India SPOT Awards for outstanding contributions.
- Ranked **325th nationally** in GATE-2003.