

# SANDEEP PANDITA

# HEAD OF DATA AND AI | DATA ENGINEERING | GENERATIVE AI | BIGDATA SME | SOLUTION ENGINEERING

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Dubai UAE

### PROFESSIONAL SUMMARY

An experienced Architect with over 16 years of experience in Data and AI. Hands-on expertise in Generative AI, Large Language Models and Big Data technologies. Designing and leading complex AI-driven and big data solutions, leveraging state-of-the-art technologies to drive innovation and transformation.

- Lead the design and development of scalable, Al-driven systems, focusing on Generative AI technologies and Large Language Models (LLM) to solve complex business challenges.
- Evaluate and recommend AI tools, frameworks and platforms like Langchain, Langgraph, Langflow, Landsmith, MCP architectures, TensorFlow, PyTorch, Azure ML, AWS SageMaker, Hugging Face.
- Implement Generative AI use cases, such as intelligent document processing, report generation, and scenario simulation using technologies like OpenAI, Hugging Face, Anthropic, and cloud-native Gen AI services.
- Enable conversational AI capabilities with tools like Azure OpenAI Service, Google Vertex AI, AWS Bedrock and ChatGPT API.
- Build Al Agents, fine-tune and customize LLMs, vision, Al agents and lead PoCs for advanced Al capabilities, including generative Al and foundation models.
- Define AI/ML solution architectures, data flow, and integration strategies with enterprise systems.
- Lead technical discussions and provide thought leadership on AI best practices and industry trends.
- Experience with platforms like OpenAI, Hugging Face, Claude, and toolkits such as PyTorch and TensorFlow.
- Proficiency with orchestration tools MLflow, Apache Spark, Airflow and data processing at scale.
- Managed Hortonworks, Cloudera, Acceldata ODP clusters with more than 1000 nodes for Tier 1 customers.
- Proven experience in high-growth tech startups in series A and B stages.

## **TECHNOLOGY PROWESS:**

- Cloud Amazon Web Services, Google Cloud and Microsoft Azure
- Artificial Intelligence ML, Deep Learning, LLMs, Agentic Al
- Al Governance Credo Al
- Al Administration Nvidia (NCP-AII)
- LLM Fine Tuning Low-Rank Adaptation (LoRA), Quantized Low-Rank Adaptation (QLoRA), BitFit
- Hadoop cluster Administration- Apache Hadoop, Cloudera, Hortonworks, Acceldata ODP, IBM BigInsights
- ETL/ELT Nifi, Azure Databricks, ADF, Informatica, Talend, Ab Initio
- Al Prototyping Datastax, Visual Studio, Dataflow, Postman, streamlit, Cursor Al
- Programming Python

## AI PROJECTS:

- Implementing AI agents to automate and streamline customer account and non-account queries across banks in the Middle-East.
- Building LLM powered observability applications for cybersecurity companies.
- Building an explainability layer for zero day and critical vulnerabilities on top of NIST or STRIDE frameworks for cybersecurity companies.
- Implementing a Mathematical Problem solving engine using Langchain with an ability to process feedback.
- Automated Document Processing and Information Extraction for Loan Applications to make the process smooth and less error prone.
- Enterprise Answer Bot for interacting with the internal documents of a bank.
- Email recommender system and "Tax assessment and profiling application" for one of the biggest Tax authority in ASEAN

- Optimizing EHR for one of the biggest health organizations in ASEAN.
- Identify the fraudulent nodes in a mobile network by identifying suspicious patterns.

# **EXPERIENCE:**

# HEAD OF DATA AND Al at Agilitics, Dubai

January 2023- Till date

- Lead the solution design and implementation for **Automated customer query handler** for account and non account holders for leading banks in UAE to optimise customer service.
- Lead, mentor and grow a diverse technology team of more than 30 people across to enhance performance and innovation across EMEA and India.
- Leading Opportunity qualification, Discovery, Solution Presentation and proposal defense for customers across customers in the Middle East.
- Scoping and execution of large Proof of Concepts and ROI based data initiatives for enterprise customers and help execute the success criterion.
- Guide the development and deployment of advanced machine learning models, particularly LLMs, focusing on natural language processing (NLP), deep learning, and generative AI applications.
- Managed the PnL for Data and Al accounts in the Middle East, contributing to and executing the regional growth strategy.

### SOLUTION ENGINEERING LEADER AT ACCELDATA, Dubai

January 2022 - January 2023

- Lead Opportunity qualification, Discovery, Solution Presentation and Pricing for the ongoing opportunities.
- Own the technical win across the EMEA region and incorporate the feedback from the client interactions to the product roadmap
- Scoping and execution of Proof of Concepts for enterprise customers and delivering impactful POC on all major public cloud providers like AWS, GCP and Azure.
- Build demo assets that target specific use cases for different industry verticals that could be leveraged for customer meetings and partner enablement
- Guide and train partners to help them understand product capabilities and business value
- Author solution-oriented collaterals to reflect market direction and adoption of Data Observability Cloud
- Stay well-informed of emerging competition, cloud native data warehouses, and next generation data platforms
- Perform R&D to guide product management and engineering to improve products and make customer experience better.
- Work closely with engineering, product marketing and sales teams to meet your goals and provide support to the organization

#### SENIOR MANAGER AT ERNST AND YOUNG SINGAPORE

JANUARY 2020 - JANUARY 2022

- Solution architecture and Presales for cloud transformation accounts across ASEAN with an annual target of ARR 3M USD.
- Lead the cloud migration of Tax Authority Singapore from on-premise big data Hortonworks cluster to Microsoft Azure.
- Own the technical win across the ASEAN region and own the proposal defense for government accounts like Tax Authority, Ministry of Health and Singapore Police Force.
- Help the banking customers in the digital transformation starting from consulting, blueprinting and implementation.
- Ensure that the architectures/solutions proposed are GOVTECH compliant.
- Guide development teams to efficiently deliver new capabilities.
- Manage Client Relationships and upsell.

- Lead the enhancements, deployment and post sales support products such as Automated Anti-Steering Detection, Traffic Steering Intelligence, R360 and Mobile Network Security.
- Responsible for providing Big Data and Cloud architectures on AWS and Microsoft Azure for flagship Mobileum products.
- Scoping and execution of Proof of Concepts for enterprise customers and executing the POC.
- Articulate capabilities of Mobileum offerings and mapping them to customer use cases
- Perform Opportunity qualification, technical Discovery, Solution Presentation with the telecom customer across ME and Europe.
- Understand the customer use cases and define the success criterion for the PoCs.
- Act as a product expert and guide product management and engineering to improve products and make customer experience better

#### LEAD ENGINEER AT VALTECH INDIA

July 2014 - November 2016

- Work on big data scripts (Map-Reduce, Pig, Spark, Sqoop) as a part of the development team
- Work on cloud development projects and write ETL in ADF, Databricks etc

#### TEAM LEAD AT NTT DATA INDIA

June 2012 - July 2014

- Work on big data scripts (Map-Reduce,Pig,Spark,Sqoop) as a part of the development team and contribute to the Performance Optimization of the ETL.
- Work on the Hadoop cluster setup, capacity planning and deployment of the big data solutions

# **Education:**

- Bangalore Institute of Technology, Bangalore, 2009
- MBA Lean Operations and Systems from Christ University Bangalore India 2012