

SUMMARY

Highly motivated and results-oriented Artificial Intelligence Engineer with a strong foundation in machine learning and deep learning algorithms. Proven ability to develop and deploy AI/ML models, analyze complex datasets, and implement natural language processing techniques. Expertise in Python, Java, and Kotlin, with a strong understanding of cloud platforms like AWS and Azure. Possessing a solid understanding of software development best practices, including agile methodologies and DevOps principles. Eager to contribute to innovative AI solutions and drive impactful business outcomes.

SKILLS

Machine Learning

Supervised Learning, Unsupervised Learning, Deep Learning, Natural Language Processing, Model Training and Evaluation, Feature Engineering

LLMs

Experience in fine tuning and utilization (OpenAI, Anthropic Claude, Google Gemini, Meta LLaMA)
Developed advanced prompt engineering strategies to improve LLM outputs.

Gen AI

Solutioning and RAG implementation.
Worked on agentic AI systems, Google ADK, LangChain and MCP servers.
Performed fine-tuning of language models using RAG techniques.
Integrated knowledge graphs to enhance context-aware retrieval.
Applied hyperparameter tuning for optimization.

Cloud Platforms

AWS (SageMaker, EMR, Glue, Bedrock, EC2, S3, Lambda, DynamoDB, CDK, SDKs), Azure (AI Services, Machine Learning, Cognitive Services), Google Cloud Platform.

Programming Languages

Python (Pandas, NumPy, Scikit-learn, TensorFlow/PyTorch), Java, Kotlin

Machine Learning Libraries

Scikit-learn, TensorFlow, PyTorch, XGBoost, Spacy, NLTK, OpenCV

Databases

SQL, NoSQL (MongoDB, DynamoDB), Graph DB (Neo4j Knowledge Graph)

DevOps

Git, Bitbucket, Jira, Confluence, Jenkins

Tools

Visual Studio Code, PyCharm, Android Studio, Jupyter Notebook, AWS Console, Azure AI Studio, SageMaker Studio

Mobile Development

Android (Java, Kotlin, Android Studio, MVVM, Jetpack Compose)

Other

Agile Methodologies, REST APIs, Unit Testing, CI/CD

WORK EXPERIENCE

Specialist [AI Engineer]	Current
Tata Elxsi	Chennai
<ul style="list-style-type: none">Designed and deployed machine learning models for real-world use cases like predictive maintenance, fraud detection, and customer churn, leveraging large-scale structured and unstructured datasets.Spearheaded the integration and fine-tuning of domain-specific LLMs (OpenAI, Gemini, Claude), incorporating RAG pipelines for enhanced contextual generation.	

- Built agentic AI workflows using LangChain, Google ADK, and MCP Server to power autonomous business agents.
- Engineered ETL pipelines for data ingestion using AWS Glue, transformed datasets with PySpark, and managed large data lakes in S3.
- Utilized Neo4j knowledge graphs to encode domain knowledge for retrieval and semantic search in LLM-powered applications.
- Collaborated cross-functionally with data engineers and domain experts to build end-to-end ML pipelines using SageMaker, EC2, and Lambda.
- Optimized model performance through hyperparameter tuning, cross-validation, and model explainability techniques (SHAP, LIME).
- Led the AI migration of legacy rule-based systems to modern data-driven architectures across multiple verticals including media, telecom, and finance.

Senior Data Scientist

March 2019 - March 2021

RBL Finserve (Subsidiary of Indusind Bank)

- Developed an integrated AI-powered loan origination and processing platform for MSME, AHL, JLG, and Micro LAP segments.
- Implemented credit risk scoring models using historical repayment and demographic data to automate loan decisions.
- Built biometric-based KYC verification using image processing and classification models integrated with UIDAI.
- Developed dashboards using Tableau and Dash for loan analytics and fraud trend insights.
- Managed the complete MLOps lifecycle, from data acquisition to model versioning and deployment using containerized microservices.

Data Scientist

January 2018 - March 2019

Bharat Financial Inclusion Pvt Ltd (Subsidiary of Indusind Bank)

- Built scalable data pipelines for rural financial transactions involving biometric data, payments, and service history using Apache Spark and MS SQL Server.
- Integrated real-time UIDAI APIs and orchestrated backend services for rural transaction insights.
- Applied clustering algorithms to identify underserved areas and user segmentation for targeted financial services outreach.

Data Scientist

March 2016 - December 2017

Precision Biometric Ltd

- Developed the PB510 Diagnostic Tool leveraging OpenCV and TensorFlow for fingerprint quality analysis and biometric data processing.
- Engineered a biometric feature extraction pipeline from raw images and matched them with UIDAI authentication mechanisms.
- Conducted PID encryption, session handling, and secure communication to maintain biometric data privacy and compliance.

RECENT PROJECTS

Novabot

April 2025 - Current

Novabot ChatBot App is a conversational AI assistant designed to help users navigate sports TV schedules and programming using natural language. It combines the power of graph databases with advanced LLMs to deliver context-aware, intelligent responses for complex queries about sports content.

- Interprets and responds to natural language queries about TV programming.
- Uses Neo4j to model rich relationships between shows, teams, channels, and schedules.
- Integrates Google Gemini 2.0 Flash for high-performance language understanding and generation.
- Employs LangChain for orchestrating AI agent behavior and generating Cypher queries.
- Frontend built with Streamlit to provide a responsive, modern user interface.

SmartFixer

August 2024 - February 2025

SmartFixer is an intelligent assistant designed to improve code quality and streamline the code review process. It integrates with CI/CD tools like SonarQube, Snyk, Postman, and JUnit to automatically aggregate logs and test results. By analyzing these inputs along with customer reviews, SmartFixer suggests context-aware code fixes directly within Pull Requests (PRs).

- Developed an intelligent tool that aggregates logs from CI/CD tools such as SonarQube, Snyk, Postman, JUnit, etc., along with customer reviews.
- Designed and implemented logic to suggest inline code fixes within Pull Requests (PRs) based on static analysis, test failures, and security scan outputs.
- Integrated learning from previous code reviews to enforce team-specific coding standards and automate fix suggestions.
- Enhanced developer productivity by automating remediation of common issues and providing contextual recommendations.

EDUCATION

AMS College of Engineering

B.Tech - Information Technology60%

PSM Matriculation School

XII76%

ICF High School

X83%

LICENSES & CERTIFICATIONS

Microsoft Certified: Azure AI Fundamentals

AI-900

Microsoft Certified: Azure AI Engineer Associate

AI-102

AWS Certified Machine Learning Engineer - Associate

MLA-C01

KEY STRENGTHS

- Strong analytical and problem-solving skills
- Excellent communication and teamwork abilities
- Ability to work independently and as part of a team
- Passion for learning new technologies and best practices
- Proven ability to deliver high-quality, user-centric applications