



MusaddiqueHussain Jahagirdar

Data Scientist – Generative AI Solution Architect

Experienced data scientist with a strong background in Generative AI, Agentic AI framework, ML and .NET development. Proficient in data analysis, modeling, and visualization using Python and ML. Skilled in utilizing the .NET framework to build scalable applications and integrate data science solutions. Strong problem-solving skills and a passion for leveraging data to drive business insights and innovation.

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15 July, 1988

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WORK EXPERIENCE

Total 14+ years of experience in .NET, 8 years in Python, Chatbots, Machine Learning & NLP, 2.5+ year in Generative AI.

Data Scientist | GenAI Engineer | AIForceAgentic Platform HCLTech Private Ltd.

10/2024 - Present, Bangalore, India

Achievements/Task

- Technologies:** Python, Blazor, MongoDB, Agentic AI Framework, LangChain, LangGraph, Redis, ChromaDB, AKS, ACR, Azure AI Services, Azure AD, GitHub Actions
- Primary goal:** Automate cloud, database, and network management tasks via specialized AI agents. Seamlessly overlay AI capabilities on top of existing IT systems without disrupting existing tools. Enable secure, context-aware, and continuously evolving agentic behavior in IT operations.
- Solution:** Developed a modular platform with five core components: Agent Studio, Runtime Engine, AI Hub, Value Framework, and AI Dashboard. Implemented agent lifecycle management using LangChain/LangGraph and integrated it with a React-based frontend. Deployed Redis and ChromaDB for fast agent memory and vector search capabilities. Secured and scaled the platform via Azure AD integration and AKS-based deployment architecture. Integrated Azure AI services to enhance agent decision-making and natural language capabilities. Established a "Learn–Unlearn–Relearn" framework for controlled agent skill development and validation in sandbox environments.
- Result:** Reduced manual IT operations effort by automating 60–70% of routine tasks through agentic workflows. Achieved zero-downtime deployment and secure scalability via AKS and GitOps-driven AI Hub. Delivered measurable ROI improvements and KPIs through the Value Framework analytics engine.

Data Scientist | Gen AI Engineer | HR Helpdesk Copilot Accenture Solution Private Ltd.

03/2023 – 09/2024, Bangalore, India

Achievements/Task

- Primary goal:** Create exceptional conversational experiences, intelligent information retrieval, and a seamless user interface.
- Solution:** Utilized Retrieval-Augmented Generation (RAG) for interactive conversations, integrated Azure Cognitive Search for efficient information retrieval, incorporated Azure OpenAI for enhanced language understanding, leveraged LangChain for customize LLM, prompts, chains and memory. developed a responsive web interface using ASP.NET Core Blazor and MudBlazor, enhance security with Azure AD Authentication.
- Result:** Successful delivery of a chatbot solution with highly engaging conversations, accurate information retrieval, natural language understanding, and a visually appealing user interface. Revolutionized communication, improved information access, and enhanced user satisfaction within the enterprise.

COMPETENCIES

.NET, Python, S Q L, FastAPI, NLP

ML Algorithms, Docker, Kubernetes, Agentic AI

Chatbots & Real-time Application, LangChain & OpenAI

TECHNICAL SKILLS

Operating System:

Windows, Linux (necessary commands for Docker)

Integrated Development Environment:

Visual Studio, VS Code, PyCharm, Jupyter Notebook, Colab

Programming Languages:

C#, Python, SQL

Machine Learning Frameworks & Libraries:

Machine Learning, Deep Learning, Classification, Regression, Clustering, Scikit-Learn, Scipy, TensorFlow, Keras, PyTorch, Hugging Face, NumPy, Pandas, BeautifulSoup4, Spacy, OpenCV.

Generative AI Frameworks, Protocol & Models:

Agentic AI, LangChain, LangGraph, Crew.ai, LlamaIndex & Microsoft Agent Framework, Azure OpenAI, Google Gemini, Amazon & Open source LLM Models (Ollama) and Guardrails, RLHF Based pipelines, LoRA, QLoRA, MCP, A2A.

Web Technologies:

ASP.NET Core MVC, Blazor Server & Web assembly, SignalR

Web Services:

ASP.NET Core Web API, FastAPI, WebSocket

Azure and Bot Technologies:

Microsoft Bot Framework, Azure AI Services, AI Foundry & ML Databricks, Azure Cognitive Services, Dialogflow, Twilio.

Database, Data Analysis & Visualization:

MS SQL, Graph & Vector Databases, Statistical Analysis, Exploratory Data Analysis, Hypothesis Testing, Matplotlib

Version & Data Control:

Git, MLOps, Agile, Azure DevOps, GitHub Enterprise, CI/CD Pipelines, MLflow, DVC, Prompt flow, LLMOps

Cloud Platforms, Containers & Infrastructure as Code:

Azure, Google, AWS, Docker, Kubernetes, AKS, GKE, EKS Terraform, Ansible

PROJECTS (Open-Source Contribution)

- myPortfolio: [MusaddiqueHussainLabs](#)
- [musaddiquehussainlabs · PyPI](#)

Data Scientist | Gen AI Engineer | Email Advisor

Accenture Solution Private Ltd

01/2021 - 02/2023,

Achievements/Tasks

- Developed an Email Advisor system using Python, machine & deep learning, standard packages and frameworks, Azure DevOps Repos, custom packages with Azure Artifacts, and FastAPI.
- Primary goal:** Automate the resolution process for incoming emails by intelligently analyzing and responding to them.
- Solution:** Utilized Python with machine learning and deep learning techniques, standard packages and frameworks for natural language processing, text classification, and sentiment analysis. Employed Azure DevOps Repos for version control and collaboration, custom packages stored in Azure Artifacts, and FastAPI for building a scalable backend API.
- Result:** Successfully delivered an efficient and automated Email Advisor system that intelligently analyzes incoming emails, extracts relevant information, and determines appropriate resolutions. Leveraged established tools and algorithms for accurate natural language processing and sentiment analysis. Facilitated collaboration with Azure DevOps Repos and reusable components with Azure Artifacts. FastAPI ensured quick response times for email resolution, improving efficiency and customer satisfaction. Overall, this project successfully delivered an Email Advisor system that streamlined the resolution process, enhanced efficiency, and improved customer satisfaction. Achieved significant FTE reduction of approximately 10% and cost savings of up to 30%

Data Scientist | AI Engineer | Live Agent Portal

Accenture Solution Private Ltd

09/2019 - 12/2020,

Achievements/Tasks

- Developed a Live Agent Portal using C#, ASP.NET Core Blazor, MudBlazor, ASP.NET SignalR, WebSockets, ASP.NET Core Web API, Azure AD Authentication, and SQL Server.
- Primary goal:** Create a robust and secure portal for real-time communication between agents and customers.
- Solution:** Utilized ASP.NET Core Web API for backend data management, ASP.NET Core Blazor and MudBlazor for the frontend web interface, ASP.NET SignalR and WebSockets for real-time messaging, Azure AD Authentication for secure access control, and SQL Server for efficient data storage.
- Result:** Successful delivery of a highly functional Live Agent Portal enabling real-time communication, intuitive user interface, instant messaging, secure authentication, and efficient data management. Improved customer support, streamlined communication, and enhanced data security within the organization.

Chatbot Developer | AI Engineer | Enterprise Chatbots

Accenture Solution Private Ltd

10/2017 - 08/2019,

Achievements/Tasks

- Developed chatbot solutions for banking and learning domains using C#, Microsoft Bot Framework, Azure Cognitive Services, Azure Language Studio, Speech Studio, LUIS, and QnA Maker.
- Primary goal:** Provide efficient customer support and educational assistance through conversational AI and natural language understanding.
- Solution:** Utilized C# and Microsoft Bot Framework for chatbot development. Leveraged Azure Cognitive Services, including Azure Language Studio and Speech Studio, for advanced language processing and voice interactions. Integrated LUIS for intent recognition and entity extraction, and employed QnA Maker for a knowledge base of frequently asked questions.

Result: Successfully delivered chatbot solutions that personalized customer support in the banking domain, addressed inquiries and provided transactional information. Enhanced educational experiences in the learning domain by delivering relevant information, course recommendations, and accurate responses. Enabled voice interactions, improved language understanding, and enhanced user satisfaction.

Senior Software Developer | NewsPage Clients

Accenture Solution Private Ltd

07/2015 - 10/2017,

Bengaluru, India

Senior Software Developer | Work Management Tool

Capgemini Private Ltd

09/2011 - 07/2015

Bengaluru, India

MetaConvo NLP 1.0 (Enterprise) (01/2022 – 09/2024)

- Text processing library for Python. It provides production-grade,scalable, and trainable versions of the latest research in natural language processing.
- Created custom extraction models like, Email Parser with attachments,documents analysis including disambiguation, relevant, entities,relations, sentiment, PII and language detection

EDUCATION

Bachelor of Engineering in Electronics and Communication

BLDE Association of Bijapur, Affiliated under V.T.U Belgaum
2006 – 2010

Diploma in .NET

From NIIT, Pune
2010 – 2011

CERTIFICATES

AZ-900: Microsoft Azure Fundamentals

12/2019

HONOR AWARDS

Growth Catalyst Award – Accenture (02/2022)

ACE awards program

Growth Catalyst Award – Accenture (09/2022)

ACE awards program

Growth Catalyst Award – Accenture (12/2021)

ACE awards program

Orange Award – Accenture (03/2021)

ACE awards program

Orange Award – Accenture (12/2018)

ACE awards program

Team Award – Accenture (12/2018)

ACE awards program

Spot Award – Accenture (08/2016)

Award from APP R&R

Excellent Service Delivery Award – Capgemini (03/2015)

Award from R&R Team

LANGUAGES

English

Native or Bilingual Proficiency

Hindi

Native or Bilingual Proficiency

Arabic

Elementary Proficiency

Urdu

Native or Bilingual Proficiency

Kannada

Limited Working Proficiency

PERSONAL DETAILS

Passport Number:

W8198514

Marital Status:

Married

INTERESTS

CL / CI

Artificial Intelligence

Automations