

BANAVATH SIDDHU

Email id: Banavath.siddhu@cognizant.com

Role: Associate – Data Scientist

Address: Hyderabad

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Summary

- Dedicated Associate Data Scientist with 3.1 years of experience.
- Experienced in Generative AI with Python, Machine Learning, Prompt Engineering, Vertex AI, Azure OpenAI, AWS, LangChain, LLMs, Agentic AI.
- Experienced in end-to end software development life cycle, experience includes requirement analysis, technical design documentation, development, and documentation of the application.
- Experienced in developing smart Generative AI assistants using Python, LLMs, Fast API and Vertex AI, React.js, Streamlit.
- Proficient in modern development tools and methodologies, I am committed to utilizing my technical skills to contribute effectively to project goals and deliver efficient solutions.
- Eager to join a dynamic team where I can contribute to business development and advance my career.

Education

Title of the Degree with Branch	College/University	Year of Passing
B.Tech in ECE	IIT – Naya Raipur	2022

Skills

Operating Systems	Windows, Linux
Skills	Python, Machine Learning, Deep Learning, Generative AI.
Generative AI	Prompt Engineering, Fine tuning, Prompt tuning, Embeddings, LangChain, Langgraph, Vertex AI.
Languages	Python.
Databases	Firebase, MySQL.
Cloud	GCP, AWS, Azure OpenAI.
Domain Knowledge	Retail, Insurance, Pharmaceuticals.
Version Control Systems Supporting Tools	Azure DevOps, Git, GitHub, Visual Studio Code, Azure Databricks, AWS Lambda function, Postman.

Certifications

- AWS Certified Cloud Practitioner External Certification
- AZURE-900 Fundamentals External Certification
- Certified in Generative AI Fundamentals.

Employment History

Name of the Company	Designation	Address of the employer	From (MM/DD/YYYY)	To (MM/DD/YYYY)	Duration (Years)
Cognizant Technology Solutions	Associate – Data Scientist	Hyderabad	18-08-2022	Till now	3 Years 1 Month

Project Experience

Organization: **Cognizant Technology Solutions**
(Tenure: From 18/08/2022 to till date)

Project #1

Project Name	Claim Intake Assistant (Smart Assistant for Claim Intake – Absence/Disability)
Client	Cognizant Bluebolt
Project Type	Research & Development
Role	Developer
Duration	6 months
Platform	Google Cloud Platform
Languages	Python, Fast API, LangChain Framework.
Tools	Visual Studio Code, Postman, Google Cloud SDK, Firebase, Azure DevOps, Google Cloud services (Vertex AI, Cloud Run, Firebase).
Project Description:	Build a Smart Assistant for Claim Intake – Absence/Disability: Employees require leave for various reasons such as expanding their families, caring for a loved one or recovering from an illness. While these situations are often necessary, the leave process can be complex and overwhelming, involving multiple claims and programs. Employees need clear understanding and support throughout their leave experience, starting from planning leave and returning to work. This includes access to resources, information on different types of leave options (like FMLA and PFML) and connections to disability insurance programs. Providing this comprehensive support

	<p>helps employees navigate the leave process and focus on their personal needs without added stress.</p> <p>Without the smart Claim assistant, we have below challenges.</p> <ol style="list-style-type: none"> 1. Knowledge Gap: Around 62% of employees are unaware of available benefits. 2. Enhance Self-Service for Customers: Limited self-service capabilities hinder customers' ability to find the right absence reasons and submit the absence, leading to a surge in call center volume. 3. Communication Gap: Around 38% of employees said they could have been made aware of helpful benefits by their employer. 4. Increase In Operational Effort: Due to incorrect selection of absence reason, missing information, unavailability of leave balances or lack of proper documentation, the claim administrators spend significant time in verifying the information, contacting employees and processing claims. <p>With the implementation of the smart claim Assistant, we will be able to overcome all the above-mentioned challenges and, we get below benefits.</p> <ol style="list-style-type: none"> 1. Streamlined Claim Intake 2. Enhanced Intake Submission Quality 3. Improved Claimant Experience
Responsibilities	<ul style="list-style-type: none"> • Connect with Cognizant leadership and Gen AI team members to understand and discuss the requirements and their possible solutions. • Understand the business requirements. • Develop the services and implement the business logic. • Fixing issues raised at testing. • Track the progress of daily work and make sure to deliver on time as promised. • Help the team in case of any technical challenges or decision making. • Perform the code and document review and make sure feedback are taken care. • Committing the codebase to Azure DevOps.

Project #2

Project Name	Annuity Assistant (Smart Assistant for Annuity Product Information)
Client	Cognizant Bluebolt
Project Type	Research & Development
Role	Developer
Duration	6 months
Platform	Google Cloud Platform
Languages	Python Fast API, LangChain Framework.

Tools	Visual Studio Code, Postman, Google Cloud SDK, Firebase, Azure DevOps, Google Cloud services (Vertex AI, Cloud Run, Firebase).
Project Description:	<p>Annuity is a contract as part of an insurance plan between an individual and an insurance company that requires the insurer to make payments to the individual either immediately or in the future. The individuals (agents, brokers, call center agents and customers) typically ask a lot of questions to understand the annuity plans in detail. Before this smart Annuity Assistants, we had the below business challenges.</p> <ol style="list-style-type: none"> 1. Lengthy Training: Onboarding new agents and getting them up to speed on annuity products is time-consuming and resource intensive. 2. Enabling Self-Service for Customers: Limited self-service capabilities hinder customers' ability to find the right product fit, leading to a surge in call center volume. 3. Difficulty in finding accurate information quickly: Call center agents have difficulty in finding accurate details quickly to assist customers. 4. Lengthy timeline: Enhanced solution to incorporate new federal rule changes and product additions, requiring updates to the knowledge repository and potentially adjustments of existing solutions. Validation of these changes is crucial for ensuring compliance and efficacy. 5. Inconsistent Service: Knowledge gaps erode customer trust and satisfaction, driving churn and impacting revenue. <p>With the implementation of the smart Annuity Assistant, we can overcome all the above-mentioned challenges and now users can chat with the assistants to get answers to common FAQ's and product information with minimum time and with utmost accuracy.</p>
Responsibilities	<ul style="list-style-type: none"> • Connect with Cognizant leadership and Gen AI team members to understand and discuss the requirements and their possible solutions. • Understand the business requirements. • Develop the services and implement the business logic. • Fixing issues raised at testing. • Track the progress of daily work and make sure to deliver on time as promised. • Help the team in case of any technical challenges or decision making. • Perform the code and document review and make sure feedback are taken care. • Committing the codebase to Azure DevOps.
Achievement	<ul style="list-style-type: none"> • Got appreciation from Cognizant leadership.

Project #3

Project Name	DTMS Document Generator
Client	GSK (GlaxoSmithKline) Pharmaceuticals
Project Type	GSK Research & Development Tech
Role	GenAI Developer
Duration	6 months

Platform	Azure OpenAI
Languages	Python, Flask & Fast API Framework, JavaScript.
Tools	Azure Databricks, Azure blob container, Azure App Services, Visual Studio Code, Postman.
Project Description:	<p>DTMS Document Generator is an innovative solution designed to automate and streamline the creation of structured documents across industries. Leveraging Generative AI, the system enables users to generate accurate, contextually relevant, and customized documents in seconds with a single click, eliminating the need for time-consuming manual drafting, formatting, and data entry.</p> <p>Key Features</p> <p>1. One-Click Automation: Users can generate complete documents instantly by selecting a template with relevant information. Removes repetitive tasks like copy-pasting, formatting, or manually updating templates.</p> <p>Benefits</p> <p>Time Savings: Reduces document creation time from hours to seconds. Error Reduction: Minimizes human errors in data entry and formatting. Consistency: Maintains uniform branding, terminology, and compliance across all outputs. Accessibility: User-friendly interface for both technical and non-technical users.</p> <p>With the implementation of the smart DTMS Document Generator, we can overcome all the above-mentioned challenges and now users can chat with the assistants to get answers to common FAQ's and product information with minimum time and with utmost accuracy.</p>
Responsibilities	<ul style="list-style-type: none"> • Connect with GSK leadership and Gen AI team members to understand and discuss the requirements and their possible solutions. • Understand the business requirements. • Develop the services and implement the business logic. • Fixing issues raised at testing. • Track the progress of daily work and make sure to deliver on time as promised. • Help the team in case of any technical challenges or decision making. • Perform the code and document review and make sure feedback are taken care.
Achievement	<ul style="list-style-type: none"> • Got appreciation from Cognizant & GSK leadership.

Project #4

Project Name	Test Data Management
Client	Cigna-Evernorth Pharmaceuticals

Project Type	Cigna Research & Development Tech
Role	GenAI Developer
Duration	6 months
Platform	AWS
Languages	Python, Fast API Framework, Streamlit.
Tools	Lambda Function, API Gateway service, Visual Studio Code, Postman.
Project Description:	<p>We developed an intelligent Test Data Management solution for pharmaceutical companies using Generative AI techniques, aimed at automating the extraction, traversal, and presentation of complex clinical data. The system leverages LLMs (OpenAI GPT-4 and Claude 3.5 Sonnet) integrated via LangChain to dynamically process inputs such as Group ID or NDC ID, fetch hierarchical data from IBM DB2 tables and external APIs (Group ID → Super ID → Plan ID → Drug List → Clinical Rules → NDC), and generate both tabular and natural language summaries for business users. Deployed using AWS Lambda and API Gateway for a serverless architecture, enabling real-time table generation and intelligent summarization, significantly reducing manual effort, enhancing customer support, and accelerating QA processes.</p> <p>Benefits</p> <p>Reduced Manual Effort: Automated the process of test data retrieval, saving significant time across development and support teams.</p> <p>Improved Accuracy: LLMs minimized human errors and provided contextually accurate data outputs.</p> <p>Accelerated Testing Cycles: Enabled real-time data availability for QA, reducing delays in software delivery.</p> <p>Enhanced Customer Support: Made it easy for support teams to access necessary information, improving response times and service quality.</p> <p>Scalable Architecture: Designed to handle large volumes of test data with minimal performance overhead, suitable for enterprise-level pharma operations.</p> <p>Successfully delivered an end-to-end, GenAI-powered test data management platform that automated complex clinical data retrieval and summarization, optimized backend operations, and enhanced data accessibility resulting in improved efficiency, scalability, and user experience for pharmaceutical stakeholders.</p>
Responsibilities	<ul style="list-style-type: none"> • Connect with Cigna leadership and Gen AI team members to understand and discuss the requirements and their possible solutions. • Understand the business requirements. • Develop the services and implement the business logic.

	<ul style="list-style-type: none">• Fixing issues raised at testing.• Track the progress of daily work and make sure to deliver on time as promised.• Help the team in case of any technical challenges or decision making.• Perform the code and document review and make sure feedback are taken care.
Achievement	<ul style="list-style-type: none">• Got appreciation from Cognizant & Cigna leadership.

Declaration:

I hereby declare that all the information given above is true and correct to the best of my knowledge and belief.

Banavath Siddhu
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