

Tiger Analytics

Azure OpenAl Build -RAG

Azure OpenAl Workshop

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Author: Tiger Analytics

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Tiger Analytics' coaches introduction - Thailand AI build



Ashish Ram
Lead Data Scientist

With over 10 years of experience, Ashish Kumar R. is a seasoned tech-driven problem-solver specializing in the field of analytics. His passion for AI and machine learning fuels his drive to harness data for creating impactful solutions. Ashish's proven track record demonstrates his ability to effectively apply technological expertise to tackle real-world challenges.



Nalini Agarwala

Data Scientist

With 4+ years of experience,
Nalini is a Data scientist skilled in
transforming raw data into
actionable insights. Passionate
about using statistical analysis
and machine learning to solve
complex problems.



Abin Joseph

Senior Machine Learning Engineer

ML/MLOps Engineer with 5 years of experience Cloud, ML Apps and ETL. Developed scalable cloud based solutions for advanced data analytics. Strong working knowledge in Python, Spark, Kubernetes.



Vinay Kumar Soni

Senior Analyst

Data Science specialist with three years of hands-on experience, I specialize in crafting end to end NLP solutions tailored to diverse business needs, and empowering businesses to enhance interactions, automate processes, and derive actionable insights.



Abdul Shamgarhwala

Lead Machine Learning Engineer

Technology Enthusiast with 8+ years of software development experience. Expertise in applied machine learning, model deployment, MLOps, LLMOps and ML related data engineering roles.

Tiger Analytics' coaches introduction - Indonesia AI build



Rajesh Dash
Director-Data Science Solutions

Experienced Data Science Professional with a demonstrated history of working in the information technology and services industry. Strong understanding of AI, Analytics and Data. Have worked as Cloud Data modernization lead in the US helping clients embrace cloud transformation. Exposure to direct client stakeholders including CXOs.



Apoorv BhardwajAssociate Director, Machine

Learning Engineering

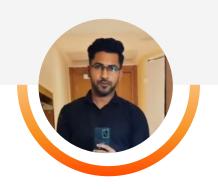
Effective multi tasker with 12+ years of experience in the full project life cycle from understanding business requirements to end-to-end delivery. Working closely with clients, stakeholders and development teams across the globe to deliver complex enterprise solutions.



Aashit Singh

Senior Data Scientist

An innovative and diligent ML engineer with good understanding of not just the traditional, CNN & Sequence based models, but also of the complete process of starting a project from scratch, deploying it in production and managing all the involved stakeholders.



Venkatesh Das

Senior Data Scientist

5+ years of experience of working on cutting-edge Generative AI solutions using state-of-the-art Transformer architectures to address critical business challenges with significant impact.



Ashraf Khan

Senior Machine learning Engineer

Machine Learning Engineer with 7 years of experience in developing ML and Analytics solutions, processing vast amounts of data, and building efficient ETL pipelines.

Tiger Analytics' coaches introduction - Malaysia AI build



Rajesh Dash
Director-Data Science Solutions

Experienced Data Science Professional with a demonstrated history of working in the information technology and services industry. Strong understanding of AI, Analytics and Data. Have worked as Cloud Data modernization lead in the US helping clients embrace cloud transformation. Exposure to direct client stakeholders including CXOs.



Apoorv Bhardwaj

Associate Director, Machine
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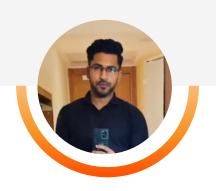
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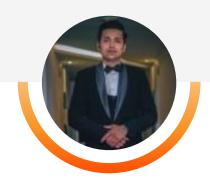
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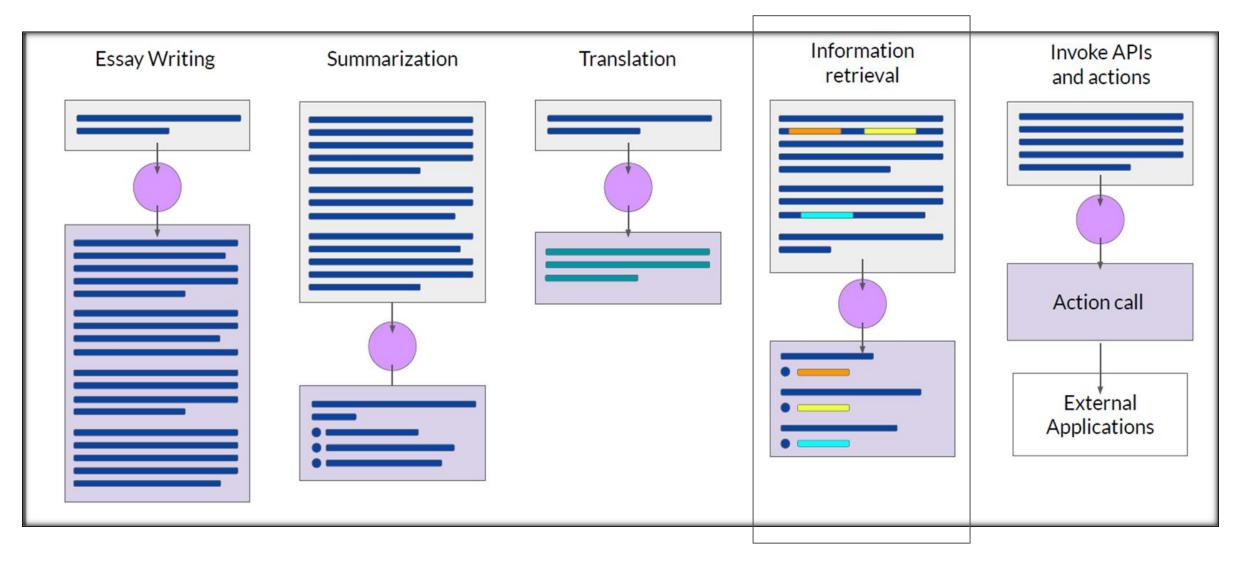
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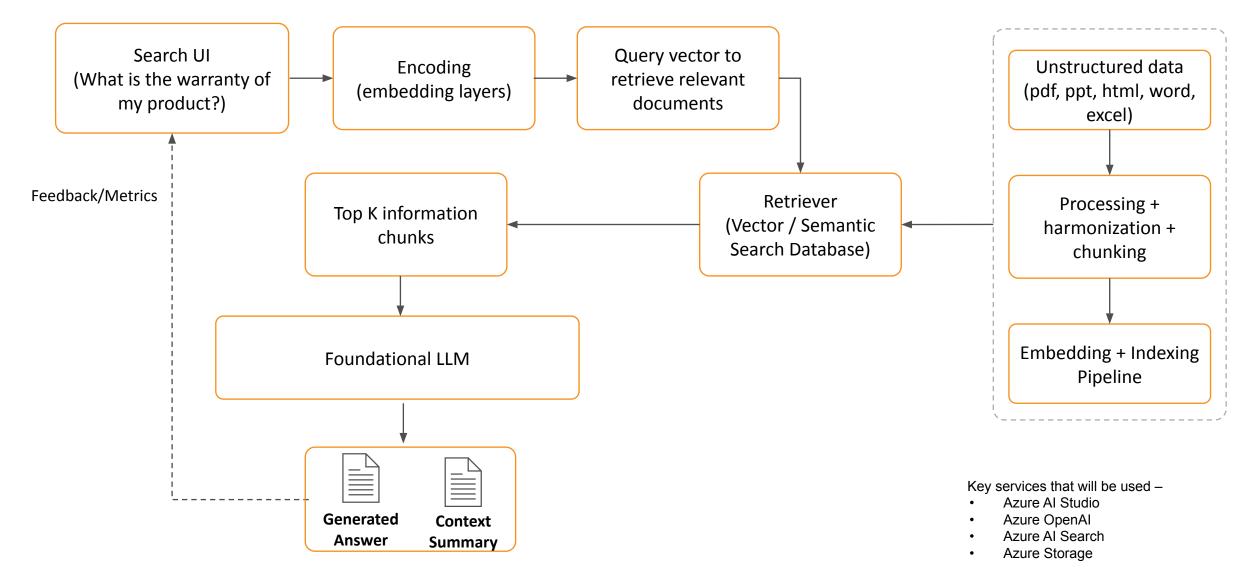
Setup Checklist

- 1 Wifi Connection
- 2 Laptop Charge Connection
- 3 Github Link Check
- 4 Username & Login Check Received and Able to login
- 5 Azure OpenAl Check

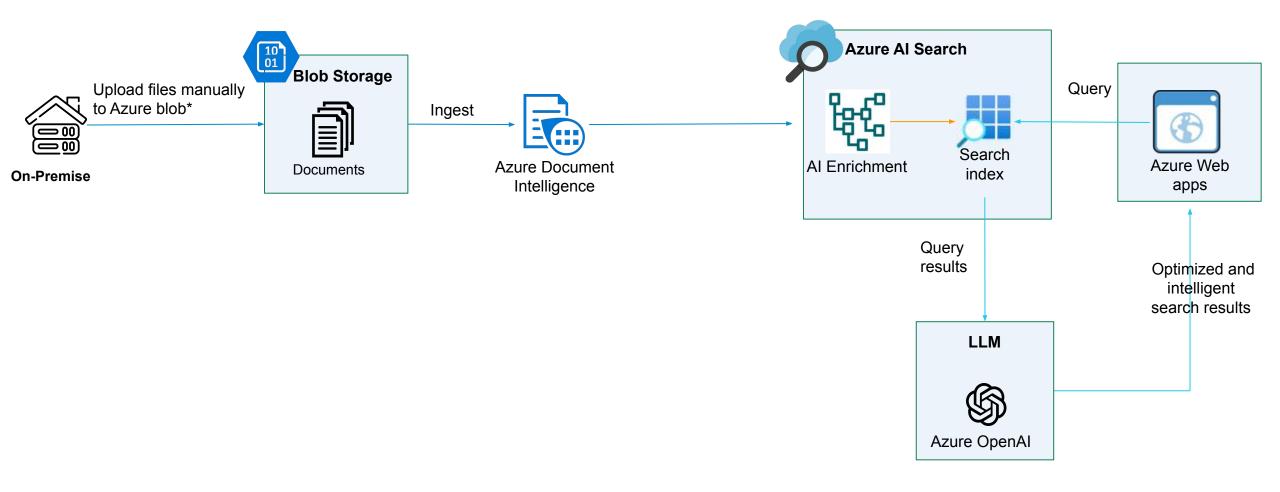
Al Build Use Case Introduction Most of the initial use cases of Gen Al fall in these categories



RAG – Solution Approach



Azure – Reference Architecture Diagram



^{*} file transfer from on-premise to blob can be automated in the future stages.

Prompt Engineering | Structure

Persona Definition System Role: You are an AI assistant that helps people find information. User: \nProvide crisp answer in 1 to 7 bullet points for the question based on the Clear Instruction given context truthfully. Please use neutral and professional language. If you are **Desired Output Format** unable to, please say 'I don't know' as one bullet. \n\nquestion: <user_query> — **User Query** \n\ncontext: <context> **Business Context** nFollow the below mentioned guidelines while generating response: nGuideline 1: **Additional Guidelines** nGuideline 2: \n\nanswer:\n-" **Answer Key**

Prompt Engineering | Techniques

Zero Shot Prompting

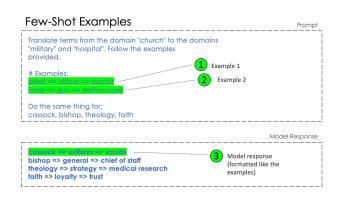
Simplest which generates response without any examples

Few Shot Prompting

Provide examples to generate response

Chain of Thought

Uses multi-step reasoning ability by thinking step by step using the provided instruction or examples



Standard Prompting

Model Input

- Q: Roger has 5 tennis balls. He buys 2 more cans of tennis balls. Each can has 3 tennis balls. How many tennis balls does he have now?
- A: The answer is 11.
- Q: The cafeteria had 23 apples. If they used 20 to make lunch and bought 6 more, how many apples do they have?

Chain-of-Thought Prompting

Model Input

- Q: Roger has 5 tennis balls. He buys 2 more cans of tennis balls. Each can has 3 tennis balls. How many tennis balls does he have now?
- A: Roger started with 5 balls. 2 cans of 3 tennis balls each is 6 tennis balls. 5 + 6 = 11. The answer is 11.
- Q: The cafeteria had 23 apples. If they used 20 to make lunch and bought 6 more, how many apples do they have?

Model Output

A: The answer is 27.

Model Output

A: The cafeteria had 23 apples originally. They used 20 to make lunch. So they had 23 - 20 = 3. They bought 6 more apples, so they have 3 + 6 = 9. The answer is 9

Azure OpenAl Hackathon

Hands-on Exercise

Scan to share feedback



