

Azure Developer  
*Community*



# Tamil Nadu

Welcomes you



# What we do?



Meetups



Network of Beginners,  
Professionals &  
Experts



Azure Cert Study Jam



Corporate / Startup  
Talk



Podcasts



Fun contests

# Azure Open AI

# Introduction



- Experience in Analytics, Reporting and data engineering
- Azure Dev Lead and Microsoft Certified - Azure and AI Engineer
- Enthusiastic learner and tech community contributor

## Navaneethan Gopal

Principal Data Scientist @ Ingram Micro

[LinkedIn](https://www.linkedin.com/in/navaneethan-gopal-9b101612/) – <https://www.linkedin.com/in/navaneethan-gopal-9b101612/>

[Twitter](https://twitter.com/NavaneethhGopal) – <https://twitter.com/NavaneethhGopal>



# Think Twice!!



#Azure Developer Community

# AI Updates

This week witnessed lot of interesting AI developments like

- [Google](#) released PaLM API
- [OpenAI](#) released GPT-4 through ChatGPT plus subscription
- [Stanford University](#) researchers released Alpaca (open-source alternative to ChatGPT)
- [Anthropic](#) AI introduced Claude model
- PyTorch Lightning 2.0 and [PyTorch](#) 2.0 release
- Midjourney V5 (Realistic AI Image Generator)
- [Microsoft](#) 365 Copilot
- [AssemblyAI](#) releases Conformer-1 (Robust speech recognition model 650k hours of audio data)
- ChatGLM ( opensource bilingual Chatbot model based on GLM)

# Agenda



Welcome  
Note



Azure Open  
AI



Open AI  
Models



Prompt  
Design



Use cases



Resources

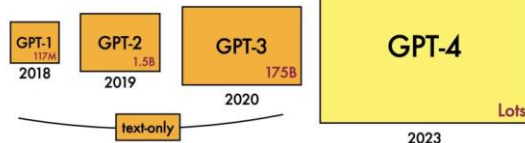
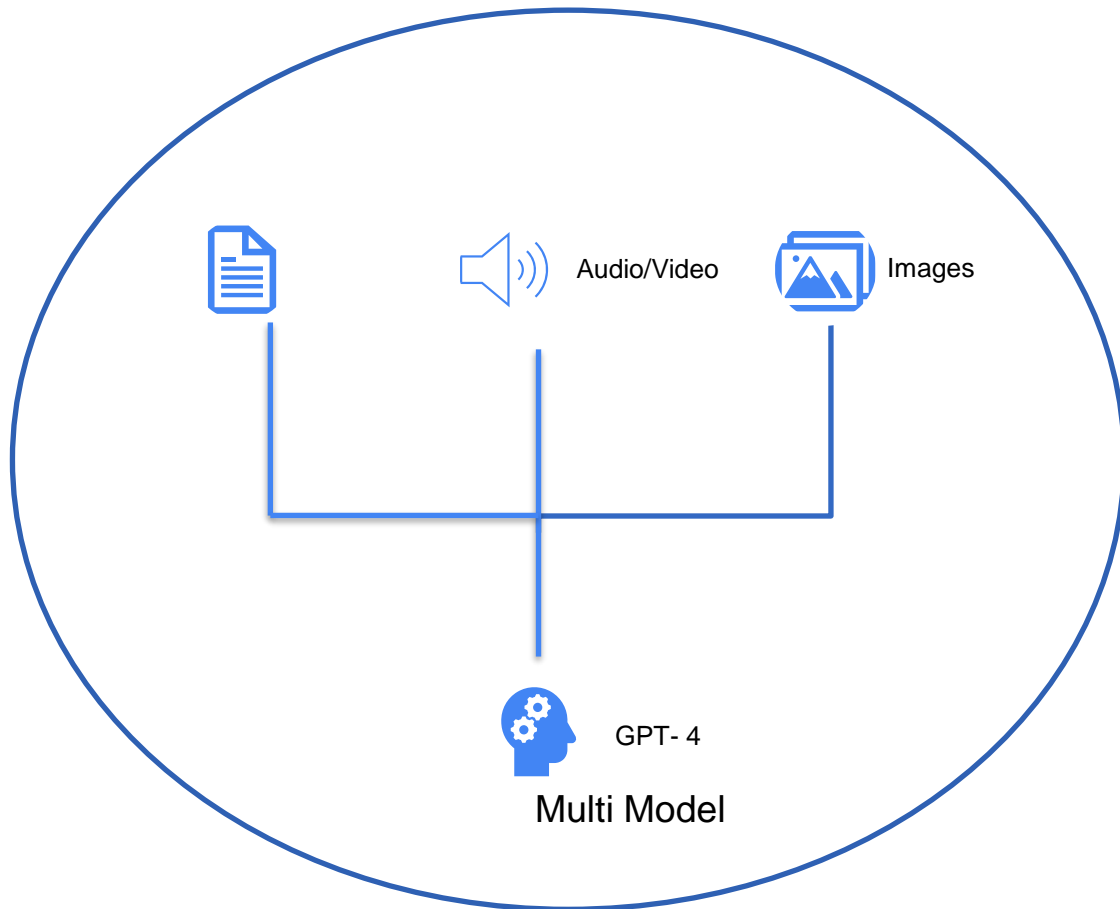
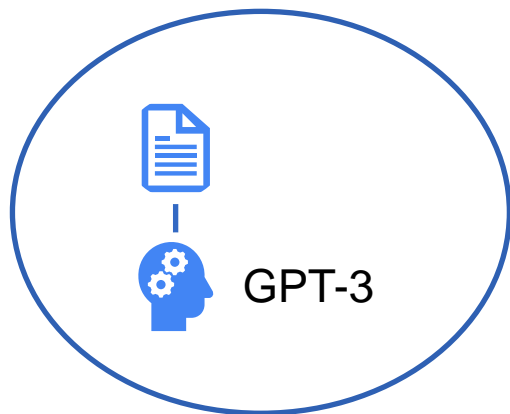
## Target Audience:

Level: Beginner

The session is intended for developers and beginners who are new to Azure Cloud, Machine Learning.

Azure account, Jupyter Notebook and Power BI

# GPT-3 Vs GPT-4

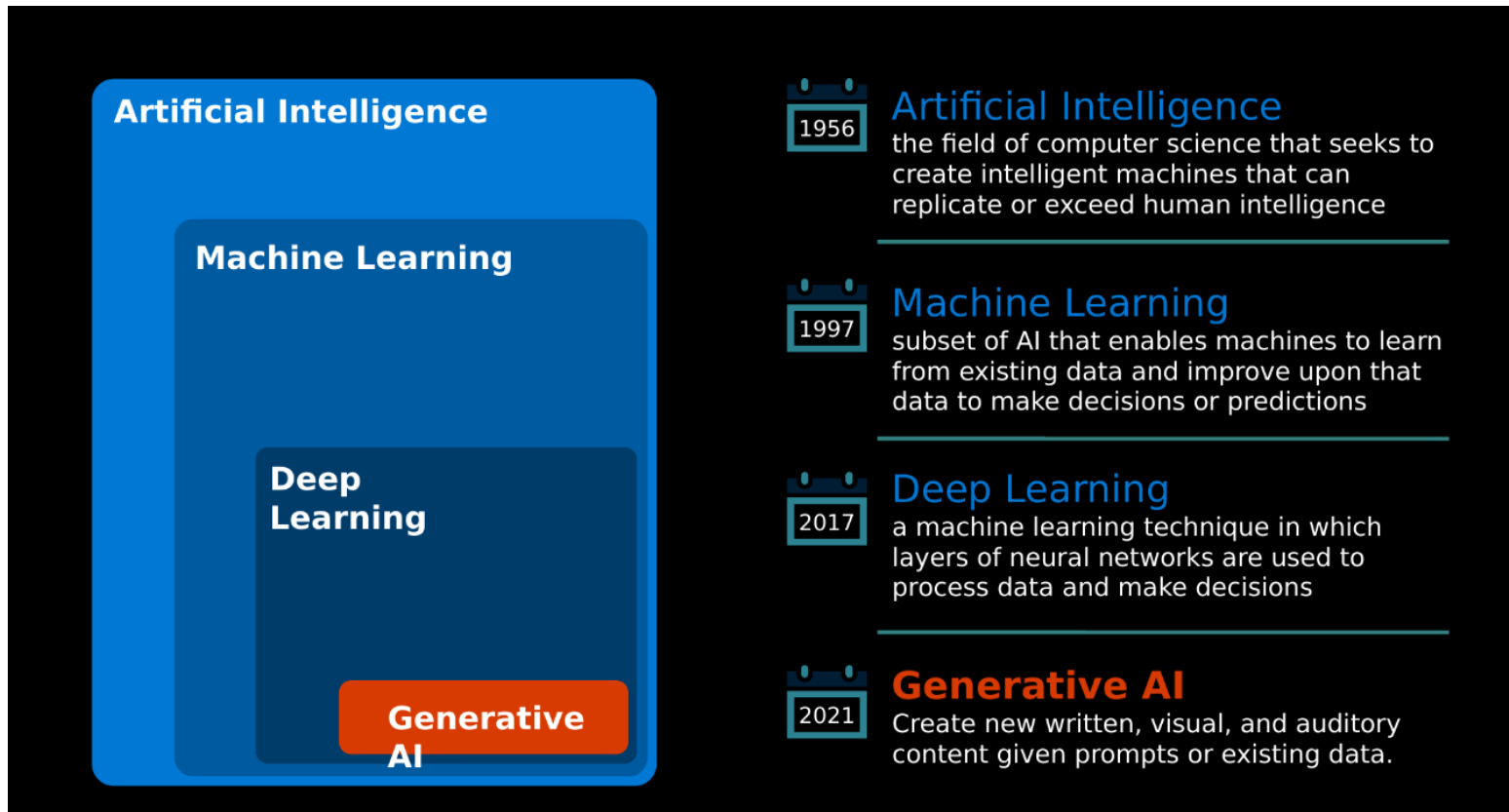


A large-scale, multimodal model : image text → text

Source:



# Generative AI



# Why Azure OpenAI services

- Pre-trained generative AI models
- Customization capabilities; the ability to fine-tune AI models with your own data
- Built-in tools to detect and mitigate harmful use cases so users can implement AI responsibly
- Enterprise-grade security with role-based access control (RBAC) and private networks

## Customer Stories

- Morgan Stanley wealth management deploys GPT-4 to organize its vast knowledge base.
- Khan Academy explores the potential for GPT-4 in a limited pilot program.

# Use Cases

- End to end call center analytics that takes your process all the way from classification through to email generation to increase productivity and save time and effort during call center operations.
- Customer 360 where hyper-personalization will use more than one of the above capabilities to ensure you have a complete and holistic view of your customers and are increasing your customer satisfaction, whilst using feedback and trends to serve them better in the future.
- Business Process Automation like document automation where we use capabilities across search, code generation and content generation to do things faster and more efficiently.

## Content Generation

- Automate responses to customers
- Generate personalized UI for their company's website

## Summarization

- Summarize conversation logs
- Social media trend summarization
- Subject matter expert documentation

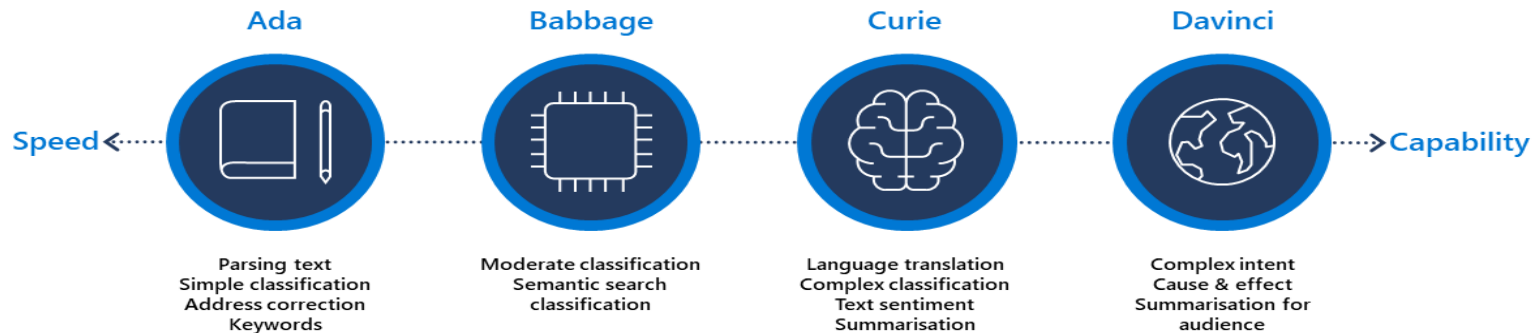
## Code Generation

- Code documentation
- Convert natural language to programming code

## Semantic Search

- Search reviews
- Information discovery and knowledge mining

# GPT- 3 models



## Codex models

- Davinci
- Cushman

# Deep dive and Play Ground

- Prompt Design
- Embeddings
- Fine-tuning

# Responsible AI

- **Fairness:** AI systems shouldn't make decisions that discriminate against or support bias of a group or individual.
- **Reliability and Safety:** AI systems should respond safely to new situations and potential manipulation.
- **Privacy and Security:** AI systems should be secure and respect data privacy.
- **Inclusiveness:** AI systems should empower everyone and engage people.
- **Accountability:** People must be accountable for how AI systems operate.
- **Transparency:** AI systems should have explanations so users can understand how they're built and used.

# Learning Resources

- Azure free account: <https://azure.microsoft.com/en-in/free/>
- Access Request :  
[https://customervoice.microsoft.com/Pages/ResponsePage.aspx?id=v4j5cvGGr0GRqy180BHbR7en2Ais5pxKtso\\_Pz4b1\\_xUOFA5Qk1UWDRBMjg0WFhPMklzTzhKQ1dWNyQlQCN0PWcu](https://customervoice.microsoft.com/Pages/ResponsePage.aspx?id=v4j5cvGGr0GRqy180BHbR7en2Ais5pxKtso_Pz4b1_xUOFA5Qk1UWDRBMjg0WFhPMklzTzhKQ1dWNyQlQCN0PWcu)
- What is Azure Open AI? <https://learn.microsoft.com/en-us/training/modules/explore-azure-openai/>
- Pricing: <https://azure.microsoft.com/en-us/pricing/details/cognitive-services/openai-service/>
- Quota Limit: <https://learn.microsoft.com/en-gb/azure/cognitive-services/openai/quotas-limits>

# Open for Q&A



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## Thank you!!

