



Azure Synapse Analytics

OpenAI in Azure Synapse

Steve Wake

Principal BI Developer
Brown and Caldwell

What is OpenAI?

- [OpenAI, Inc.](#) – Non-Profit founded in 2015
- OpenAI, L.P. – For-Profit subsidiary of OpenAI, Inc. founded in 2019
 - Microsoft invested \$1 billion in 2019
 - Microsoft invested another \$10 billion in 2023
- OpenAI development and models are all currently running on Azure Supercomputers
- OpenAI is now investing in developing their own chips now

What is AI/LLM? – Focused on OpenAI

- Generative Pre-trained Transformer (GPT)
 - A [transformer](#) is a machine learning architecture
- [GPT-1](#) OpenAI's first [LLM \(Large Language Model\)](#) in 2018
- [GPT-2](#) 2nd LLM trained on over 7,000 unpublished fiction books and 8 million web pages in 2019. 10x increase over GPT-1.
- [GPT-3](#) 3rd LLM released in 2020 another large increase over GPT-2
- [DALL-E](#) a text-to-image model, released in 2021. Using GPT-3 in the background to “understand” prompts and create images
- [ChatGPT](#) AI chatbot based on GPT-3.5 or GPT-4 LLMs
 - Currently available in Microsoft's Bing, Edge, Windows...

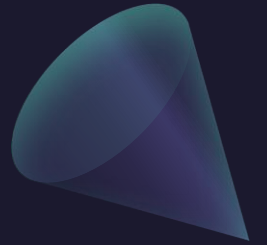


Demo

- Call AI Models in Azure Synapse Spark

Links

- Setup free account, with new email account on outlook.com - <https://azure.microsoft.com/en-us/free/synapse-analytics/>
- Microsoft Tech Community Article - <https://techcommunity.microsoft.com/t5/azure-synapse-analytics-blog/using-openai-gpt-in-synapse-analytics/ba-p/3751815>
- Synapse Spark GPT GitHub Repo - <https://github.com/thcosters/SynapseSparkGPT>



Thank You

Steve Wake

steve@wakebi.com

<https://www.linkedin.com/in/b5lurker>

