Google Cloud

All Readings:
Introduction to Large Language Models

Kindly note that the 30 minutes indicated on the platform considers the time that it may take you to browse through the reading resources provided. The total time required depends on the readings you decide to explore further.

Assembled readings on large language models:

- Module 2 Instruction Prompt: Link here
- Introduction to Large Language Models
  https://developers.google.com/machine-learning/resources/intro-llms
- Language Models are Few-Shot Learners:
  https://proceedings.neurips.cc/paper/2020/file/1457c0d6bfcb4967418bfb8ac142f64a-Paper.pdf
- LangChain on Vertex AI
  https://cloud.google.com/vertex-ai/generative-ai/docs/reasoning-engine/overview
- Learn about LLMs, Gemini models, and Vertex AI
  https://cloud.google.com/vertex-ai/generative-ai/docs/learn-resources
- Building AI-powered apps on Google Cloud databases using pgvector, LLMs and LangChain
  https://cloud.google.com/blog/products/databases/using-pgvector-llms-and-langchain-with-google-cloud-databases
- Training Large Language Models on Google Cloud
  https://github.com/GoogleCloudPlatform/llm-pipeline-examples
- Prompt Engineering for Generative AI
  https://developers.google.com/machine-learning/resources/prompt-eng
- Parameter-efficient fine-tuning of large-scale pre-trained language models
  https://www.nature.com/articles/s42256-023-00626-4
- Parameter-Efficient Fine-Tuning of Large Language Models with LoRA and QLoRA
  https://www.analyticsvidhya.com/blog/2023/08/lora-and-qlora/
- Solving a machine-learning mystery:
  https://news.mit.edu/2023/large-language-models-in-context-learning-0207

Assembled readings on generative AI:

- Background: What is a Generative Model?
  https://developers.google.com/machine-learning/gan/generative
- Gen AI for Developers
  https://cloud.google.com/ai/generative-ai?hl=en#developer-resources
- Ask a Techspert: What is generative AI?
  https://blog.google/inside-google/googlers/ask-a-techspert/what-is-generative-ai/
- What is generative AI?
  https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai
- Building the most open and innovative AI ecosystem:
  https://cloud.google.com/blog/products/ai-machine-learning/building-an-open-generative-ai-partner-ecosystem
- Generative AI is here. Who Should Control It?
  https://www.nytimes.com/2022/10/21/podcasts/hard-fork-generative-artificial-intelligence.html
- Stanford U & Google's Generative Agents Produce Believable Proxies of Human Behaviors:
  https://syncedreview.com/2023/04/12/stanford-u-googles-generative-agents-produce-believable-proxies-of-human-behaviours/
- Generative AI: Perspectives from Stanford HAI:
  https://hai.stanford.edu/sites/default/files/2023-03/Generative_AI_HAI_Perspectives.pdf
- Generative AI at Work:
  https://www.nber.org/system/files/working_papers/w31161/w31161.pdf
- The future of generative AI is niche, not generalized:
  https://www.technologyreview.com/2023/04/27/1072102/the-future-of-generative-ai-is-niche-not-generalized/
- The implications of Generative AI for businesses:
  https://www2.deloitte.com/us/en/pages/consulting/articles/generative-artificial-intelligence.html
- Proactive Risk Management in Generative AI:
  https://www2.deloitte.com/us/en/pages/consulting/articles/responsible-use-of-generative-ai.html
- How Generative AI Is Changing Creative Work:
  https://hbr.org/2022/11/how-generative-ai-is-changing-creative-work

Additional Resources:

- Attention is All You Need: https://research.google/pubs/pub46201/
- Transformer: A Novel Neural Network Architecture for Language Understanding: https://ai.googleblog.com/2017/08/transformer-novel-neural-network.html
- Transformer on Wikipedia: https://en.wikipedia.org/wiki/Transformer_(machine_learning_model)#:~:text=Transformers%20were%20introduced%20in%202017,allowing%20training%20on%20larger%20datasets
- What is Temperature in NLP? https://lukesalamone.github.io/posts/what-is-temperature/
- Model Garden: https://cloud.google.com/model-garden
- Auto-generated Summaries in Google Docs: https://ai.googleblog.com/2022/03/auto-generated-summaries-in-google-docs.html