Google Cloud

All Readings: Introduction to Large Language Models (G-LLM-I)

Here are the assembled readings on large language models:

- NLP's ImageNet moment has arrived: https://thegradient.pub/nlp-imagenet/
- Google Cloud supercharges NLP with large language models: https://cloud.google.com/blog/products/ai-machine-learning/google-cloud-supercharges-nlp-with-large-language-models
- LaMDA: our breakthrough conversation technology: https://blog.google/technology/ai/lamda/
- Language Models are Few-Shot Learners: https://proceedings.neurips.cc/paper/2020/file/1457c0d6bfcb4967418bfb8ac142f64a-Paper.pdf
- PaLM-E: An embodied multimodal language model: https://ai.googleblog.com/2023/03/palm-e-embodied-multimodal-language.html
- Pathways Language Model (PaLM): Scaling to 540 Billion Parameters for Breakthrough Performance: https://ai.googleblog.com/2022/04/pathways-language-model-palm-scaling-to.html
- PaLM API & MakerSuite: an approachable way to start prototyping and building generative AI applications: https://developers.googleblog.com/2023/03/announcing-palm-api-and-makersuite.html
- The Power of Scale for Parameter-Efficient Prompt Tuning: https://proceedings.neurips.cc/paper/2020/file/1457c0d6bfcb4967418bfb8ac142f64a-Paper.pdf
- Google Research, 2022 & beyond: Language models: https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html#LanguageModels
- Accelerating text generation with Confident Adaptive Language Modeling (CALM): https://ai.googleblog.com/2022/12/accelerating-text-generation-with.html
- Solving a machine-learning mystery: https://news.mit.edu/2023/large-language-models-in-context-learning-0207

Here are the assembled readings on generative AI:

- Ask a Techspert: What is generative AI? https://blog.google/inside-google/googlers/ask-a-techspert/what-is-generative-ai/
- Build new generative AI powered search & conversational experiences with Gen App Builder: https://cloud.google.com/blog/products/ai-machine-learning/create-generative-apps-in-minutes-with-gen-app-builder
- What is generative AI? https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai

- Google Research, 2022 & beyond: Generative models: https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html#GenerativeModels
- 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/

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/
- Bard now helps you code: https://blog.google/technology/ai/code-with-bard/
- 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