

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-supercharge-s-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/1457c0d6bfc4967418bfb8ac142f64a-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/1457c0d6bfc4967418bfb8ac142f64a-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.](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>