

## All Readings: Introduction to Generative Al (G-GENAI-I)

Here are the assembled readings on generative AI:

- Ask a Techspert: What is generative Al?
   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: <a href="https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html#GenerativeModels">https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html#GenerativeModels</a>
- Building the most open and innovative AI ecosystem: <a href="https://cloud.google.com/blog/products/ai-machine-learning/building-an-open-generative-ai-partner-ecosystem">https://cloud.google.com/blog/products/ai-machine-learning/building-an-open-generative-ai-partner-ecosystem</a>
- Generative AI is here. Who Should Control It?
   <a href="https://www.nytimes.com/2022/10/21/podcasts/hard-fork-generative-artificial-intelligence.html">https://www.nytimes.com/2022/10/21/podcasts/hard-fork-generative-artificial-intelligence.html</a>
- 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
- 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: <a href="https://hbr.org/2022/11/how-generative-ai-is-changing-creative-work">https://hbr.org/2022/11/how-generative-ai-is-changing-creative-work</a>

Here are the assembled readings on large language models:

- NLP's ImageNet moment has arrived: https://thegradient.pub/nlp-imagenet/
- LaMDA: our breakthrough conversation technology: https://blog.google/technology/ai/lamda/
- Language Models are Few-Shot Learners:
   <a href="https://proceedings.neurips.cc/paper/2020/file/1457c0d6bfcb4967418bfb8ac142f64a-Paper.pdf">https://proceedings.neurips.cc/paper/2020/file/1457c0d6bfcb4967418bfb8ac142f64a-Paper.pdf</a>
- PaLM-E: An embodied multimodal language model:
   <a href="https://ai.googleblog.com/2023/03/palm-e-embodied-multimodal-language.html">https://ai.googleblog.com/2023/03/palm-e-embodied-multimodal-language.html</a>
- 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://arxiv.org/pdf/2104.08691.pdf
- Google Research, 2022 & beyond: Language models: <a href="https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html/LanguageModels">https://ai.googleblog.com/2023/01/google-research-2022-beyond-language.html/LanguageModels</a>
- Solving a machine-learning mystery:
   <a href="https://news.mit.edu/2023/large-language-models-in-context-learning-0207">https://news.mit.edu/2023/large-language-models-in-context-learning-0207</a>

## **Additional Resources:**

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

