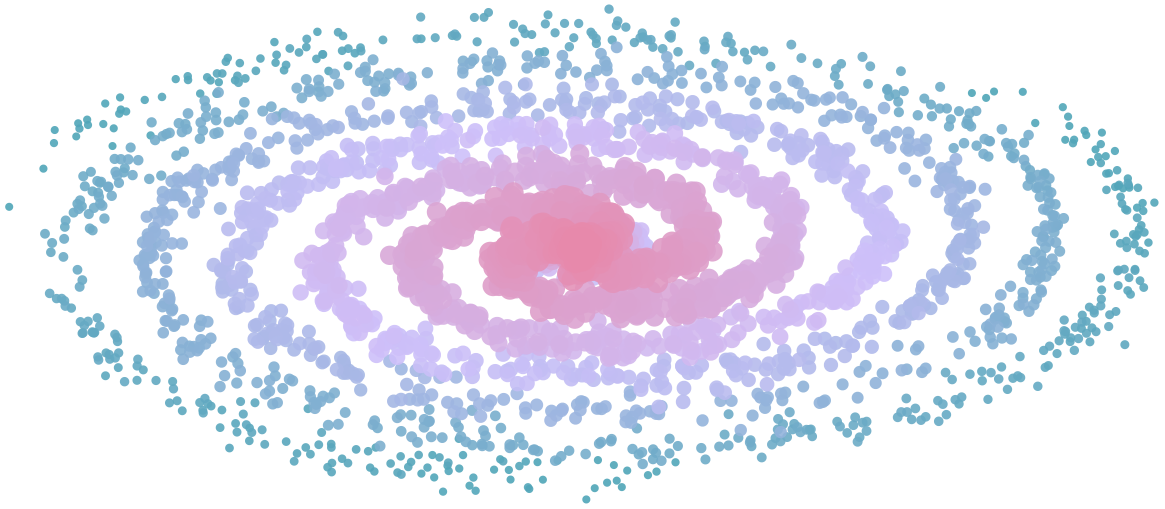
Reproduction of the Anthropic's Counting Manifold



Publish-ready workflow that lets you focus on ideas, not infrastructure

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Viacheslav Sinii	HarmlessAI	Jan. 16, 2026

Gurnee et al. (2025) have shown that the representations of token positions in a line are located on a multidimensional manifold. In this work, we reproduce a part of their paper on the open models. We show that, contrary to the demonstration of Anthropic,

- lala1
- lala2
- lala3

Results

LLaMa3.1-8B

LLaMa3.1-8B

Citation

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References

1. Gurnee, W., Ameisen, E., Kauvar, I., Tarng , J., Pearce, A., Olah, C., & Batson, J. (2025). When Models Manipulate Manifolds: The Geometry of a Counting Task. *Transformer Circuits Thread*. https://transformer-circuits.pub/2025/linebreaks/index.html↑