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now •

🚀 Every time a new LLM (Large Language Model) claims to be "the best", I put it to the test, specifically for geometric dimension reduction, also known as Midcurve generation (My PhD subtopic).

I use a consistent prompt to generate a simple (for humans!) geometric figure called a Midcurve. Why? Because most LLM benchmarks focus on text, images, or numerical tasks, but rarely on geometric reasoning.

So the real question is: Can an LLM truly understand geometric shapes and operate on them? 🤔

I recently tested the newly released Gemini 3, and the results are impressive. In the image below, the profile is the input shape. After dimension reduction, the goal is to match the actual_midcurve. Gemini 3 produced the predicted_midcurve, and the two are remarkably close.

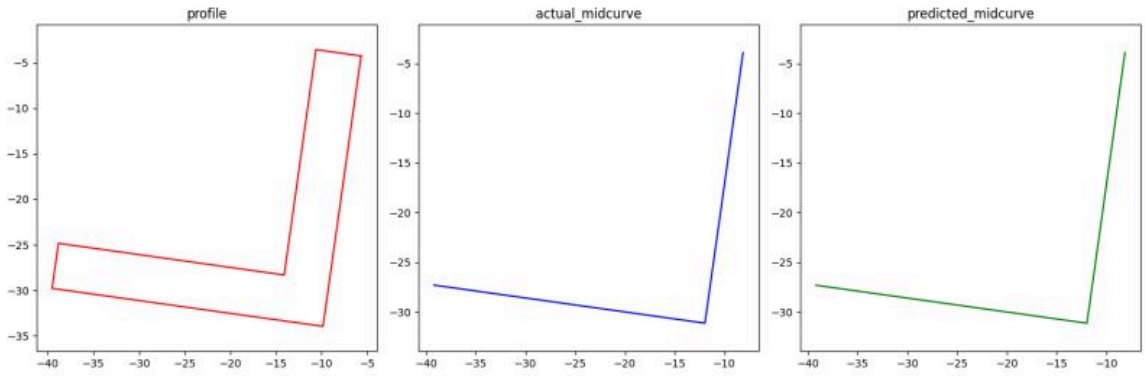
Gemini 3's output is almost pixel-perfect, the closest and best I've seen so far.
Actual points: [[-8.12, -3.91], [-11.95, -31.14], [-39.18, -27.31]]
Gemini3 points: [[-8.13, -3.91], [-11.95, -31.14], [-39.18, -27.32]]

👏 Kudos to **Google**. Congratulations! 🎉

Curious to dive deeper? Check out my Medium blogs (links in comments):

📌 Does ChatGPT Understand Geometry?
📌 Geometry, Graphs, and GPT

#AI #MachineLearning #Geometry #LLM #ArtificialIntelligence #DataScience #Tech #gde #mvpbuzz #gemini #gemini3 #midcurvenn #GoogleDevelopers #DeepMind #GDG #TensorFlow #OpenAI #Microsoft #Anthropic #MistralAI


profile
actual_midcurve
predicted_midcurve