The Practicality of Prompt Engineering

- Cost (length/complexity, financial) efficacy of prompt engineering
- ▶ 100 programmatic conversations math (GSM8K), creative writing
- ► Contribution quantification, statistical tests, old + new models
- Statistically significant improvements (paired tests): GSM8K all, creative writing GPT-4 manual CoT, zero-shot CoT
- Zero-Shot CoT cheaper, more powerful than few-shotting that came before, complicated techniques that came after
- ► TD3 to GPT-4 GSM8K gains down, CW gains up
- ▶ A few pennies per 1K tokens cheap GSM8K, expensive CW improvements



