Six Years Of Prompt Engineering

An ecosystem of specialised tools emerged to support prompt development, testing, and deployment.

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6 YEARS OF PROMPT ENGINEERING

2019-2020: Early Foundations

Zero-shot & few-shot prompting emerge as basic techniques.
Initial discovery that LLMs can follow instructions without fine-tuning.
Development of basic prompt templates.

2021: Basic Prompt Patterns

Emergence of task-specific prompt templates.
Development of role prompting ("Act as a...").
Introduction of few-shot learning with examples
Start of systematic prompt design practices.

2022: Chain-of-Thought Revolution

Chain-of-Thought (CoT) prompting
Zero-shot Chain-of-Thought (Zero-shot-CoT)

Self-consistency prompting for multiple reasoning paths

Emergence of "Let's solve this step by step" techniques

Early 2023: Advanced Reasoning Chains

Tree of Thoughts (ToT) prompting
Chain-of-Verification (CoV)
ReAct (Reasoning and Acting) framework
Introduction of structured prompting techniques
Chain-of-Knowledge (CoK) prompting

Mid 2023: Specialized Techniques

Automatic prompt optimization methods
Self-Refine prompting
Introduction of Chain-of-Empathy (CoE)
Development of Constitutional AI prompting
Emergence of RAG-optimised prompting

Late 2023: System-Level Approaches

Multi-persona prompting.
Emergence of agent-based prompting frameworks.
Development of prompt chaining architectures.
Introduction of retrieval-aware prompting
Self-debug prompting patterns

2024: Current Developments

Chain-of-Instructions (CoI)
Optimisation by PROmpting (OPRO)
Contrastive Chain-of-Thought (CCoT)
Knowledge-Driven Chain-of-Thought (KD-CoT)
Integration with RAG architectures
DSPy (Declarative Self-improving Programs)
Assertions & computational constraints in prompting

! Emerging...

Hybrid RAG-prompt techniques
Agent-aware prompting
Context-adaptive prompting
Prompt compression methods

Multi-modal prompting strategies
Long-context prompt optimization
Task decomposition prompting

COBUS GREYLING & AI

The community has really standardising prompt patterns and best practices, much like traditional software design patterns.

While organisations integrated prompt engineering into their existing software development lifecycles.

This integration necessitated the creation of sophisticated versioning and management systems to track prompt iterations and their performance.

Finally, enterprise-grade frameworks emerged, offering structured approaches to prompt development, testing, and deployment at scale, complete with governance controls and audit capabilities.

One could say that these developments shows prompt engineering's evolution from an experimental technique to a critical enterprise capability.