

Unleashing Productivity Across Departments

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Agenda

- 1. Introduction to AI and ChatGPT**
- 2. Basics of Prompt Engineering**
- 3. Advanced Prompt Crafting Techniques**
- 4. Creating Custom GPT Models**
- 5. Department-related Usecases**
- 6. Discussion, Q&A, and Conclusion**



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How often do you use Google?

Part 1: Fundamentals of AI and ChatGPT

Understanding the Basics

Understanding AI

- What is Generative AI?
- What is a Large Language Model?

**LLM is designed to create more
text that is similar to the text
in its training dataset**

Terms

- Prompt
- Tokens
- Context window
- Hallucinations

Introduction to ChatGPT

- Overview of ChatGPT
- Capabilities and Applications

Basics of Prompt Engineering

- What is Prompt Engineering?
- The Role of Prompts in AI Responses

Zero-Shot Learning

- AI responds without prior examples
- Relies solely on the provided prompt

One-Shot Learning

- AI responds with a single example
- Relies solely on the provided prompt

Few-Shot Learning

- AI is given a few examples to learn from
- Helps the model understand the context or task better

Chain of Thought Prompting

- Let's think step by step.

Tweaks

- Level of formality
- Sentence structure
- Word choice

Iterative development

“A complex system that works is invariably found to have evolved from a simple system that worked”

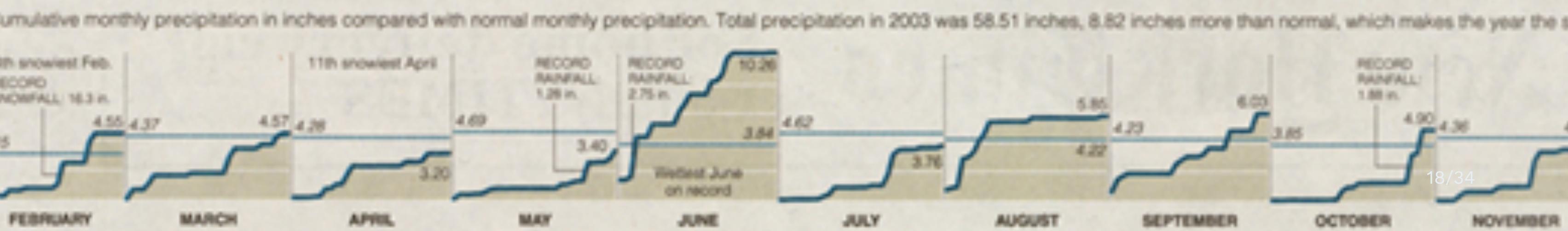
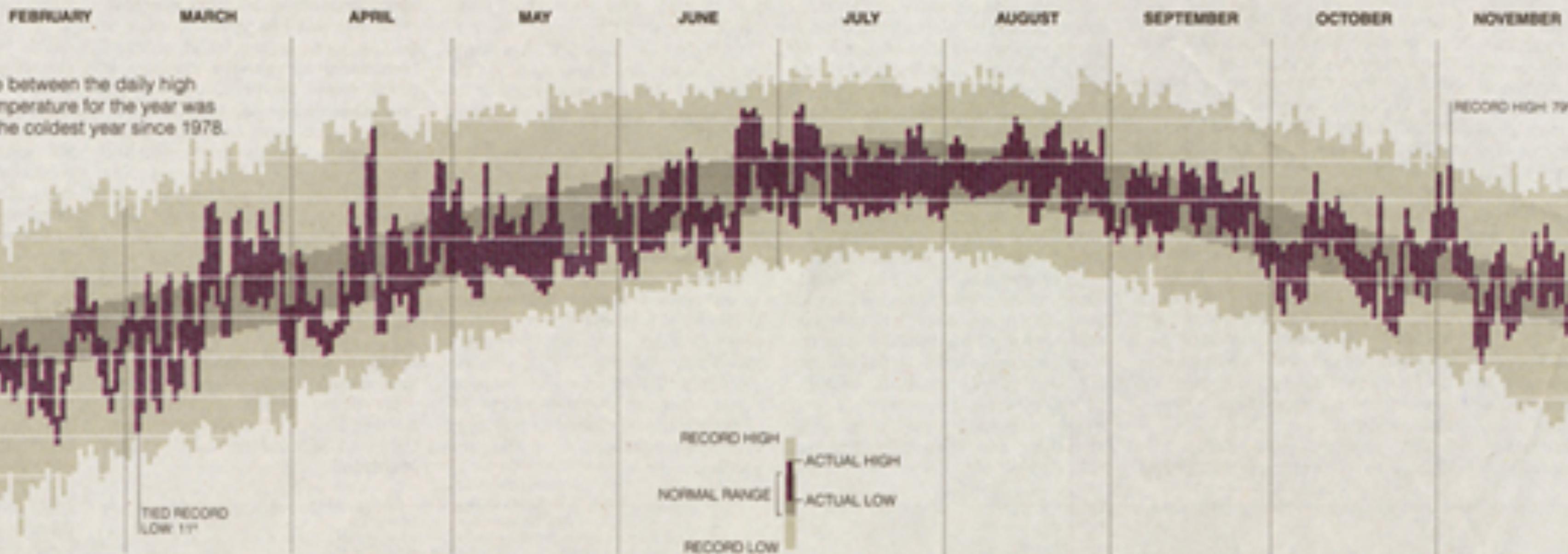
— John Gall, The Systems Bible

Iterative development

“A complex system designed from scratch never works and cannot be made to work.”

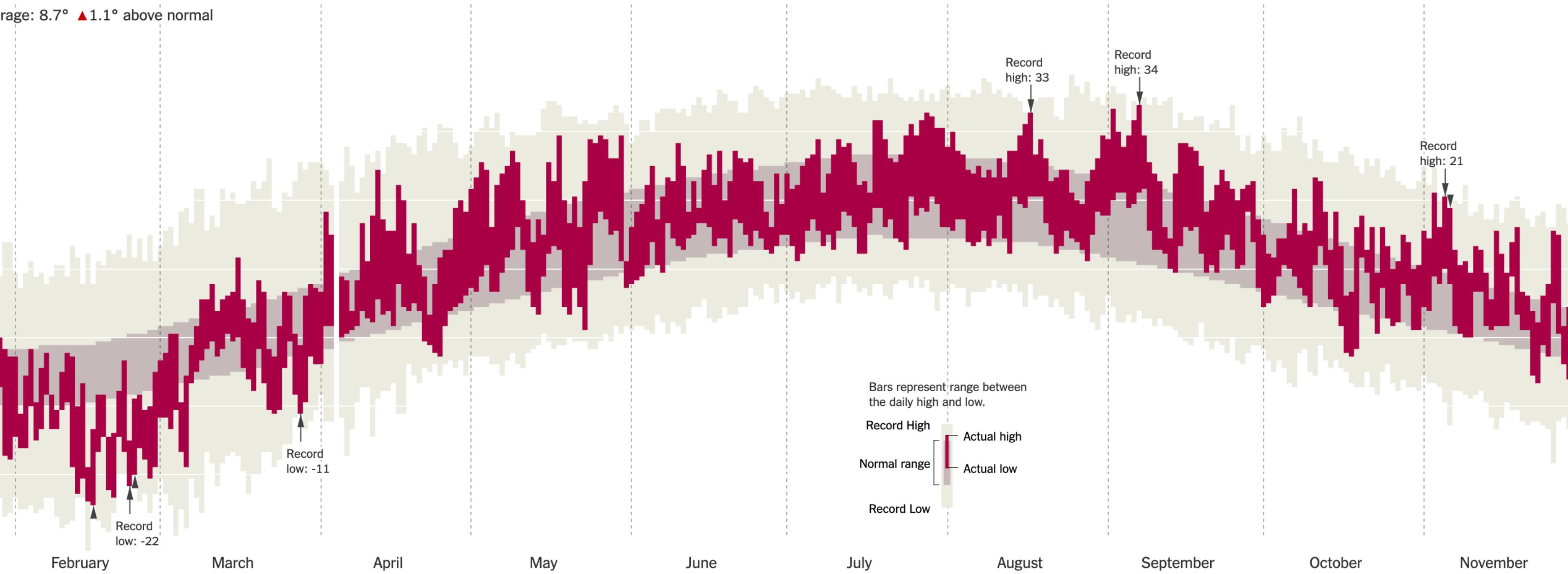
— John Gall, The Systems Bible

's Weather in 2003

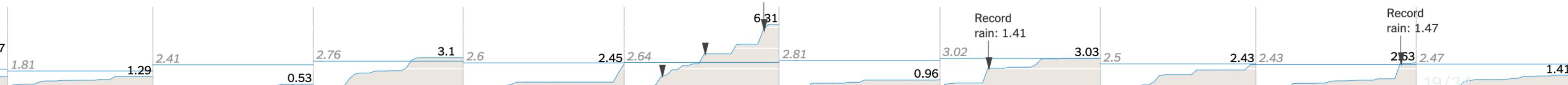


Toronto, Canada

rage: 8.7° $\Delta 1.1^\circ$ above normal



27.36" ▲ 27.4" more



precipitation, in inches, compared with normal. Precipitation totals are rainfall plus the liquid equivalent of any frozen precipitation.

Be polite!

Or demanding

Up Next: Advanced Prompt Crafting Techniques

Role Play

- AI assumes a specific character or role.
- As a Sales manager with 10 years of experience...

FACTOR framework

- **F**ocus: Define the aim or objective
- **A**udience: Tailor to the intended audience
- **C**ontext: Provide detailed background
- **T**one: Specify the tone and formality
- **O**utline: State formatting requirements
- **R**eview: Review and refine the output

**"Given the focus on [Objective],
for an audience of [Audience],
considering [Context], in a
[Tone] tone, following the
[Outline] format, [Insert Your
Specific Prompt Here]."**

Grading approach

- Ask to evaluate and quantify its response
- Ask to adjust

Mega prompts

- NASA prompt
- "Mama" prompt
- Ideation prompt

Create your own GPT

- Initial training
- Pretraining
- Fine-tuning
- Prompts
- Retrieval-Augmented Generation (RAG)
- Reinforcement learning from human feedback (RLHF)

Main Applications of LLMs

- Content Generation
- Conversation Agents
- Language Translation
- Sentiment Analysis
- Information Extraction
- Summarization
- Question Answering
- Personal Assistants
- Data Analysis
- Creative Writing

Use cases

My personal use caseses

1. Write a programming script
2. Go up and running with a new programming language
3. Practice Spanish (Character.ai)
4. Proofread my LinkedIn post
5. Boring things, eg split this text into Deckset columns
6. Knowing more about things

Brainstorming

- Reverse Brainstorming
- Six Thinking Hats
- SCAMPER technique
- First principle thinking
- Second Order Thinking

Challenges

- Hallucinations
- Context limitations
- Misinterpretations of prompt
- Costs
- Privacy concerns
- Data biases

Integrations

- Zapier
- API

Q&A