

AI Fluency: Key Terminology Cheat Sheet

Core AI Fluency Framework Terms

AI Fluency

The ability to work with AI systems in ways that are effective, efficient, ethical, and safe. Includes practical skills, knowledge, insights, and values that help you adapt to evolving AI technologies.

The 4Ds

The four core competencies of AI Fluency: Delegation, Description, Discernment, and Diligence.

Delegation

Deciding on what work should be done by humans, what work should be done by AI, and how to distribute tasks between them. Includes understanding your goals, AI capabilities, and making strategic choices about collaboration.

- **Problem Awareness:** Clearly understanding your goals and the nature of the work before involving AI.
- **Platform Awareness:** Understanding the capabilities and limitations of different AI systems.
- **Task Delegation:** Thoughtfully distributing work between humans and AI to leverage the strengths of each.

Description

Effectively communicating with AI systems. Includes clearly defining outputs, guiding AI processes, and specifying desired AI behaviors and interactions.

- **Product Description:** Defining what you want in terms of outputs, format, audience, and style
- **Process Description:** Defining how the AI approaches your request, such as providing step by step instructions for the AI to follow
- **Performance Description:** Defining the AI's behavior during your collaboration, such as whether it should be concise or detailed, challenging or supportive

Discernment

Thoughtfully and critically evaluating AI outputs, processes, behaviors and interactions. Includes assessing quality, accuracy, appropriateness, and determining areas for improvement.

- **Product Discernment:** Evaluating the quality of what AI produces (accuracy, appropriateness, coherence, relevance)
- **Process Discernment:** Evaluating how the AI arrived at its output, looking for logical errors, lapses in attention, or inappropriate reasoning steps
- **Performance Discernment:** Evaluating how the AI behaves during your interaction, considering whether its communication style is effective for your needs

Diligence

Using AI responsibly and ethically. Includes making thoughtful choices about AI systems and interactions, maintaining transparency, and taking accountability for AI-assisted work.

- **Creation Diligence:** Being thoughtful about which AI systems you use and how you interact with them
- **Transparency Diligence:** Being honest about AI's role in your work with everyone who needs to know
- **Deployment Diligence:** Taking responsibility for verifying and vouching for the outputs you use or share

Human-AI Interaction Modes

Automation

When AI performs specific tasks based on specific human instructions. The human defines what needs to be done, and the AI executes it.

Augmentation

When humans and AI collaborate as thinking partners to complete tasks together. Involves iterative back-and-forth where both contribute to the outcome.

Agency

When humans configure AI to work independently on their behalf, including interacting with other humans or AI. The human establishes the AI's knowledge and behavior patterns rather than specifying exact actions.

AI Technical Concepts

Generative AI

AI systems that can create new content (text, images, code, etc.) rather than just analyzing existing data.

Large language models (LLMs)

Generative AI systems trained on vast amounts of text data to understand and generate human language.

Claude

Anthropic's family of large language models.

Parameters

The mathematical values within an AI model that determine how it processes information and relates different pieces of language to each other. Modern LLMs contain billions of parameters.

Neural networks

Computing systems similar to, but distinct from, biological brains. Composed of interconnected nodes organized in layers that learn patterns from data through training.

Transformer architecture

The breakthrough AI design from 2017 that enables LLMs to process sequences of text in parallel while paying attention to relationships between words across long passages.

Scaling laws

As AI models have grown larger and trained on more data with more computing power, their performance has improved in consistent patterns. This is an empirical observation. Perhaps most interestingly, entirely new capabilities can emerge at certain scale thresholds that weren't explicitly programmed.

Pre-training

The initial training phase where AI models learn patterns from vast amounts of text data, developing a foundational understanding of language and knowledge.

Fine-tuning

Additional training after pre-training where models learn to follow instructions, provide helpful responses, and avoid generating harmful content.

Context window

The amount of information an AI can consider at one time, including the conversation history and any documents you've shared. Has a maximum limit that varies by model.

Hallucination

A type of error when AI confidently states something that sounds plausible, but is actually incorrect.

Knowledge cutoff date

The point after which an AI model has no built-in knowledge of the world, based on when it was trained.

Reasoning or thinking models

Types of AI models specifically designed to think step-by-step through complex problems, showing improved capabilities for tasks requiring logical reasoning.

Temperature

A setting that controls how random an AI's responses are. "Higher" temperature produces more varied and creative outputs (think boiling water bubbling), while "lower" temperature produces more predictable and focused responses (think ice crystals).

Retrieval augmented generation (RAG)

A technique that connects AI models to external knowledge sources to improve accuracy and reduce hallucinations.

Bias

Systematic patterns in AI outputs that unfairly favor or disadvantage certain groups or perspectives, often reflecting patterns in training data.

Prompt Engineering Concepts

Prompt

The input given to an AI model, including instructions and any documents shared.

Prompt engineering

The practice of designing effective prompts for AI systems to produce desired outputs. Combines clear communication with AI-specific techniques.

Chain-of-thought prompting

Encouraging an AI to work through a problem step by step, breaking down complex tasks into smaller steps that help the AI follow your thinking and deliver better results.

Few-shot learning (n-shot prompting)

Teaching AI by showing examples of the desired input-output pattern. The "N" refers to the number of examples provided. Helps the model understand what you want without lengthy explanations.

Role or persona definition

Specifying a particular character, expertise level, or communication style for the AI to adopt when responding. Can range from general roles ("speak as a UX design expert") to specific personas ("explain this like Richard Feynman would").

Output constraints / output formatting

Clearly specifying within your prompt the desired format, length, structure, or other characteristics of the AI's response to ensure you get exactly what you need.

Think-first approach

Explicitly asking the AI to work through its reasoning process before providing a final answer, which can lead to more thorough and well-considered responses.