# Al Glossary for Court Staff

## **Core Al Concepts**

**Artificial Intelligence (AI)**: A broad term referring to the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.

Algorithm: A set of rules or instructions that a computer follows to perform a task.

#### **AI-Assisted Legal Research**

The use of AI technologies to enhance and streamline the process of conducting legal research.

## Agentic Al

A type of artificial intelligence that focuses on system capable of autonomous decision-making and action, often with limited human supervision.

### **Algorithm**

A set of rules or instructions a computer follows to perform a task or solve a problem. In AI, algorithms are the foundation of how decisions are made.

#### Automation

The use of technology to perform tasks with minimal human intervention. In courts, this can include document routing, scheduling, or filing systems.

### Bias (Algorithmic Bias)

Systematic error in AI decision-making that can lead to unfair outcomes. Bias can arise from the data the AI is trained on or how it's programmed.

## Chatbot

An AI program that simulates conversation. Courts may use chatbots to answer routine public inquiries online.

#### **ChatGPT**

A conversational AI model developed by OpenAI. A chatbot that can understand and response to human language, making it capable of engaging in conversations and answering questions.

### Cheapfake

A manipulated piece of media (image, audio, or video) created using readily available and inexpensive tools and techniques, as opposed to the advanced AI machine learning methods employed in creating deepfakes.

#### Claude Al

Is a generative AI chatbot, like ChatGPT, that is part of a family of large language models developed by Anthropic.

## **Cloud computing**

The practice of using a network of remote servers hosted on the internet to store, manage, and process data, rather than a local server of a personal computer.

### **Cognitive Computing**

A field or artificial intelligence that focuses on creating systems that can simulate human thought processes, reasoning, and learning.

### **Copilot for Microsoft 365**

An AI powered assistant designed to enhance productivity and collaboration withing the Microsoft 365 suite. Works with all the apps like Word, Excel, PowerPoint, and Teams. You can type prompts into Copilot, like in ChatGPT, to help with approved work tasks.

#### Corpus

A body or collection of data used to train AI models, especially large language models.

### **Data Mining**

The process of searching and analyzing a large batch of raw data in order to identify patterns and extract useful information that can help solve problems.

#### Data Privacy

The practice of protecting sensitive information from unauthorized access. Critical in handling case files, personal data, and other court-related information.

## **Deepfakes**

A video of a person in which their face or body has been digitally altered so that they appear to be someone else, or to be saying something they didn't say, typically used maliciously or to spread false information.

### **Deep Learning**

A type of machine learning using neural networks with many layers; it powers advanced applications like voice recognition and language translation. Deep learning is particularly good at tasks like image and speech recognition.

#### **Ethical AI**

The development and use of AI in ways that respect human rights, ensure fairness, protect user's privacy, and prevent harm. Especially important in legal and justice systems.

## **Explainability**

The ability to understand and explain how an AI system makes decisions. Important for transparency and trust in public sector use.

### Garbage In, Garbage Out (GIGO)

The principle that the quality of an AI model's output is directly determined by the quality of the data it's trained on. If the input data is flawed, the AI model will likely produce inaccurate, or even misleading, output.

#### **Generative Al**

A type of AI that can produce content like text, images, or summaries. Examples include tools like ChatGPT that can draft documents or answer questions.

## **Guardrails**

Al guardrails are a set of policies, rules, and mechanisms designed to ensure Al systems behave in a manner aligned with ethical standards, legal requirements, and business objectives. They act as safety measures preventing Al from causing harm, making biased decisions, or being misused.

#### Hallucinations

A phenomenon where an AI model generates incorrect or nonsensical information, despite appearing confident in its answers. Essentially when AI "imagines" something that doesn't exist or is based on inaccurate information. Many lawyers are being cited and fined for citing to fake case citations (hallucinated cases) in their pleadings filed with courts around the country.

## Large Language Models (LLM)

A type of artificial intelligence model trained on vast amounts of text data to understand and generate human language. These systems are capable of understanding and generating human language by processing vast amounts of data.

### Machine Learning (ML)

A subset of AI that enables systems to learn from data and improve over time without being explicitly programmed.

### Model

The result of training an AI algorithm, which can then be used to make predictions, decisions, or generate content. It is a mathematical representation of learned relationships and patterns extracted from training data.

## **Model Interpretability**

The extent to which a human can understand and explain the decision-making process of a machine learning model.

#### **Neural Network**

A computing system made up of interconnected nodes (like neurons) that can learn from data. A type of machine learning model inspired by the human brain's structure and function.

### Natural Language Processing (NLP)

The ability of computers to understand and interpret human language. Used in tools that read or analyze legal documents. A branch of artificial intelligence that enables computers to understand, process, and generate human language.

## Perplexity

Another chatbot, like ChatGPT, is an web search engine that uses a large language model to process queries and synthesize responses.

## **Predictive Analytics**

Using historical data to predict future outcomes. For example, analyzing trends in case duration or filing rates.

### **Prompts**

Written instructions or queries given as input to a generative AI model to cause it to produce a response. For examples, "Draft a form document explaining the process of applying for a marriage license."

## **Prompt Engineering**

Designing effective instructions to guide AI models in generating desired outputs. For example, drafting a research request to ask an legal research AI model to find all cases dealing with Fourth amendment searches.

## Redaction (AI-Powered)

The automatic removal of sensitive or identifying information from documents using Al.

### Responsible Al

A set of practices focused on developing and deploying AI systems in a way that is ethical, trustworthy, and beneficial to individuals and society.

### **Retrieval Augmented Generation (RAG)**

A technique that combines the strengths of information retrieval and generative large language models to produce more accurate, relevant, and up-to-date responses. Alassisted legal research platforms like Westlaw, Lexis, and Fastcase use RAG as a guardrail to ground its responses in set data or knowledge sources, instead of searching the entire web.

#### Structured vs. Unstructured Data

- Structured Data: Organized data (e.g., database entries).
- **Unstructured Data**: Free-form data (e.g., emails, PDFs, audio).

#### **Training Data**

The data used to teach an AI model how to perform a specific task.

#### Token

The smallest unit of text that an AI model processes, a kind of building block of language for AI systems. Tokens can be individual words, sub words, characters, numbers, punctuation marks, or special symbols.

## **Transparency**

The principle that AI systems should be open about how they work and make decisions—vital in court settings for accountability.

#### **Use Case**

A specific situation in which AI is applied, like case classification, form filling, or docket management.

#### Validation

The process of testing AI systems to ensure they work as intended and don't produce unintended outcomes.

### Web Scraping

The process of programmatically collecting and extracting data from websites, also known as web harvesting. For example, a program is run to collect all data from a court's website, allowing an organization to gather large amounts of data from a particular institution.

## **Al Applications in Court**

- Legal Research Tools: Al-powered tools that can quickly search and analyze vast amounts of legal documents, case law, and statutes to aid in legal research.
- Document Review/Analysis: Al systems that can automatically review and analyze large volumes of documents to identify key information, extract data, and flag potential issues.
- Transcription Services: Al-powered tools that can convert spoken audio into written text and other audio recordings.
- Translation Services: Al systems that can translate text or speech from one language to another, facilitating communication in multilingual court settings.
- Predictive Analytics/Risk Assessment: Al algorithms that can analyze data to predict case outcomes, assess risk (e.g., recidivism), or forecast court workloads.
- Chatbots/Virtual Assistants: Al-powered systems that can interact with users through text or voice, answering common questions, providing information, or guiding users through court processes.

## **Important Considerations**

- Al Bias: When Al systems produce unfair or discriminatory results due to biases present in the data they were trained on.
- Explainable AI (XAI): AI systems designed to be transparent and provide understandable explanations for their decisions or predictions.
- Human-in-the-Loop: The concept of keeping a human involved in the decisionmaking process when using AI, especially in critical areas, to ensure oversight and address limitations.
- Data Privacy: Protecting sensitive and personal information used in AI systems within the court environment.
- Algorithmic Transparency: The ability to understand how an Al algorithm works and arrives at its conclusions, crucial for accountability and trust.

### **Additional Terms**

This glossary provides a starting point for understanding key AI terms relevant to court operations. As AI technology evolves, further learning and adaptation will be necessary.