Risk-Weighted Hallucination Scoring for Legal Answers: A Conceptual Framework for Trustworthy AI in Law

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Abstract: Large Language Models (LLMs) bring revolutionary changes to legal practice yet their ability to produce fake legal information through hallucination remains a major obstacle. The current evaluation methods for legal hallucinations fail to meet the needs of the legal field because they measure factual errors without considering the severe consequences of legal mistakes (Liang, 2024). The paper establishes a vital knowledge gap through its introduction of Risk-Weighted Hallucination Score (RWHS) as a new evaluation method. The trustworthiness of AI-generated legal answers requires more than error volume because legal risk assessment needs to evaluate the severity of hallucinations based on their ability to lead to malpractice or procedural failures or legal injustices. The research establishes a systematic classification system which ranks legal hallucinations based on their consequences from severe to insignificant and creates a method to evaluate them (Chen, 2023) (Clapp, 2022). The framework enables AI developers to focus on fixing critical system failures while legal professionals can use it to validate AI outputs and maintain their technological competence and policymakers can create effective standards and oversight systems (Cohen, 2022). The paper creates a fundamental framework which enables developers to create artificial intelligence systems for legal work that are dependable and ethical and responsible. The paper introduces a new method to assess artificial intelligence systems in law by evaluating their actual impact instead of their accuracy rate.

Keywords: Large Language Models (LLMs); AI Hallucination; Legal Technology; Legal Risk Management; AI Evaluation; Computational Law; Legal Ethics; Responsible AI.

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I. INTRODUCTION

The implementation of Large Language Models (LLMs) in legal practice creates a major change in operational methods which will enhance legal research through AI assistance and generate documents automatically and perform complex predictive analysis. The Legal AI Paradigm enables legal resource accessibility for everyone while legal professionals can work more efficiently with deeper analytical capabilities. The implementation of these advanced tools faces a major obstacle because they tend to produce false information. The high-pressure legal field requires absolute accuracy and dependability because hallucination creates an unacceptable critical failure. The AI systems produce fake court decisions and false legal information and made-up legal concepts and wrong court procedures with convincing authority. The fabricated legal information which LLMs create through hallucination presents an existential threat to AI system use in law because it could result in legal misconduct and court penalties and permanent damage to client rights (Zakir et al., 2024; Quteishat, 2024).

The current methods used to identify and assess hallucinations in literature demonstrate a significant knowledge deficit. The current evaluation methods including accuracy and precision and fact-checking scores lack domain specificity and fail to detect risks. The current evaluation system uses a simple binary system which labels responses as either correct or incorrect without considering the legal impact of mistakes (Magesh et al., 2024; Athaluri et al., 2023). The current evaluation method fails to meet the needs of legal work because it treats incorrect commas differently from incorrect Supreme Court decisions. The field requires a new evaluation system which goes past error counting to assess potential damage. The research fills this knowledge deficit through the development of the Risk-Weighted Hallucination Score (RWHS) framework. The main argument of this research states that AI-generated legal responses need evaluation based on their potential legal impact instead of their factual correctness. The main contribution of this research establishes a quantitative system for evaluating AIgenerated mistakes based on their severity rather than their existence (Rodrigues, 2020).

The paper follows this structure. The paper bases its RWHS framework on legal error nature and attorney

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technological competence requirements in Section 2. The framework's main component appears in Section 3 through a complete classification system of legal hallucination risk. The qualitative assessment process demonstrates how taxonomy works in practical applications. The framework creates theoretical effects which affect AI developers and legal practitioners and regulatory bodies according to Section 5. The paper concludes by presenting research directions in Section 6 before ending with a statement about the need for

II. PHILOSOPHICAL AND DOCTRINAL FOUNDATIONS

risk-based AI development in legal contexts.

The development of an effective framework for AI assessment in legal contexts requires initial comprehension of both technological aspects and legal and philosophical elements. The section provides essential background knowledge through its analysis of LLM hallucination as a technical matter and legal error definitions and lawyer professional obligations regarding technological competence (Ahmadi, 2024) (Dahl et al., 2024).

> Hallucination in Large Language Models

Research has established that Large Language Models (LLMs) produce "hallucinations" by creating believable yet false information. The technical issue of hallucination exists as a core system behavior which emerges from model design and training methods (Ahmadi, 2024). The models operate as predictive systems which use their training data patterns to generate word sequences while lacking the ability to store factual information or ground truth data (Dahl et al., 2024). The main technical factors which cause hallucinations according to Figure 1 stem from inadequate training data that creates knowledge gaps and produces unreliable conclusions and model design flaws that result in basic responses without proper context and model specialization that prevents accurate responses to new input data and word sequence generation algorithms that choose smooth output over accurate information (Farnschläder, 2025). The fundamental causes of hallucination need identification because they prove that this problem exists as a systematic issue which requires active prevention during law-related applications (Aditya, 2024) (Liu, 2024).

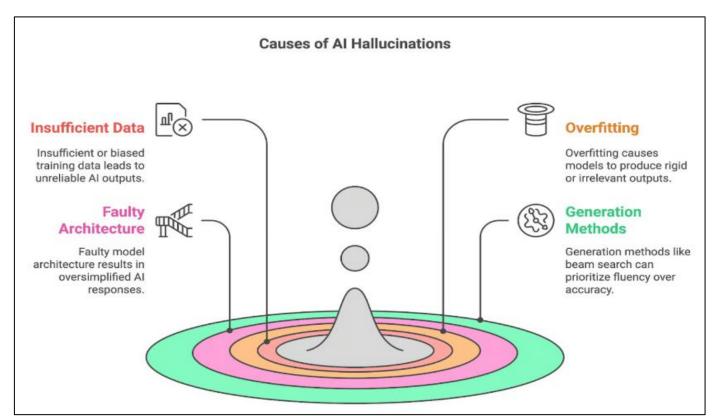


Fig 1 A Taxonomy of Technical Causes for Hallucinations in Large Language Models (Farnschläder, 2025).

➤ The Nature of Error in Law

The legal system uses consequence-based logic to evaluate errors because computer science treats all hallucinations as equal "errors." The legal system determines error significance through material assessment and prejudice potential. The legal system assesses errors through their effects on fundamental rights and fair procedures and final case results. The legal system considers procedural errors insignificant when they do not affect the outcome of the case but statute interpretation mistakes and fabricated legal

precedents result in judgment invalidation. The legal system focuses on truth only when it affects judicial outcomes and protects individual rights. AI legal value assessment requires a method that duplicates judicial principles because error effects determine its worth (Shapovalov, 2023).

➤ Duty of Competence and Technology

The legal profession must use risk-based evaluation methods for AI assessment because of its ethical responsibilities. The American Bar Association's Model Rule

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of Professional Conduct 1.1 requires lawyers to deliver competent services through Comment 8 which states lawyers must understand both legal developments and technological advantages and disadvantages. The use of an AI tool that produces dangerous hallucinations without proper risk evaluation methods directly breaks the professional duty of lawyers (Mather et al., 2001). Lawyers must maintain their professional judgment because they cannot depend on unexplained automated systems. The Risk-Weighted Hallucination Score (RWHS) framework enables lawyers to execute their duty by providing them with a mental framework. The system provides a systematic approach to risk comprehension which allows lawyers to monitor AI results and detect dangerous mistakes and determine suitable technological applications for their work. The framework enables lawyers to protect their clients and maintain legal profession integrity through proper technology usage decisions (Susskind, 2008; Kerikmäe et al., 2018).

III. THE CORE FRAMEWORK: A TAXONOMY OF LEGAL HALLUCINATION RISK

The following section introduces the Risk-Weighted Hallucination Score (RWHS) which serves as the fundamental concept of this research. The RWHS functions as a qualitative evaluation system which determines the reliability of AI-generated legal content rather than providing a single numerical value. The framework achieves its strength through its structured severity taxonomy which transforms evaluation from basic fact verification into a comprehensive assessment of consequence-based evaluation (Tonmoy et al., 2024). The RWHS framework replaces traditional truth verification with a legal-focused assessment that determines the extent of damage when a statement proves incorrect. The main conceptual advancement of this research appears in the taxonomy which groups hallucinations based on their ability to cause legal damage instead of their syntactic or semantic errors to match legal system values (Tonmoy et al., 2024).

➤ Category I: Catastrophic Hallucinations (The "Malpractice" Class)

The category includes fabrications which attack legal representation directly and create permanent damage to client cases. The classification as "catastrophic" stems from their ability to eliminate essential legal rights and force claim dismissal and defense termination and result in severe ethical penalties for lawyers. The legal system cannot reverse these mistakes which permanently damage the fundamental reason for hiring legal counsel. The errors pose the most severe risk because they create conditions for legal malpractice to occur (Tonmoy et al., 2024).

• *Inventing a Statute of Limitations:*

The creation of a statute of limitations represents a legal mistake which establishes an incorrect time frame for filing lawsuits that would result in permanent dismissal of client cases (Tonmoy et al., 2024) (Berberette et al., 2024).

• Fabricating a Binding Precedent:

The creation of a fake binding precedent results in a fictional judicial decision which becomes the core evidence

for legal arguments but ends in unsuccessful court proceedings (Tonmoy et al., 2024) (Berberette et al., 2024).

• Misstating a Fundamental Legal Element:

A lawyer who misstates essential legal components will create an unsound case strategy because they incorrectly describe the criminal intent requirements or the necessary proof for a legal claim (Berberette et al., 2024).

> Category II: Substantive Hallucinations (The "Strategic Failure" Class)

Substantive hallucinations create errors which damage legal arguments and theories even though they do not result in immediate permanent case loss. The strategic foundation of legal matters becomes completely worthless because of these errors which force attorneys to perform extensive and expensive strategic evaluations. The classification exists because these errors lead to major court and client trust issues and require large resource expenditures on incorrect assumptions while simultaneously damaging negotiation and litigation capabilities. The prolonged failure of a case through substantive errors will damage attorney credibility and client trust while leading to an unsuccessful outcome (Tonmoy et al., 2024).

• Misstating a Standard of Review:

The entire appellate strategy and argument presentation becomes wrong when an appellate court receives an incorrect standard of review. The entire appellate strategy and argument presentation becomes incorrect when an appellate court receives an incorrect standard of review between de novo and "clearly erroneous" levels (Berberette et al., 2024).

• Incorrectly Interpreting a Key Statutory Phrase:

The incorrect understanding of a vital statutory term produces an incorrect legal finding about statute application which makes all following analysis useless (Berberette et al., 2024).

• Attributing a Holding to the Wrong Judicial Authority:

The incorrect assignment of legal findings to courts without proper jurisdictional authority or precedential power damages the argument's ability to persuade (Berberette et al., 2024).

Category III: Procedural/Formal Hallucinations (The "Inefficiency" Class)

The legal process experiences hallucinations which create obstacles and slow down operations while slightly affecting its credibility but do not change the final legal results. The classification basis stems from the substantial administrative expenses and professional reputation consequences which these errors create. The process of reviewing these errors requires extra work to detect and fix them which results in delayed proceedings and excessive legal costs and possible small penalties for non-compliance with procedures. Legal professionals who experience repeated errors in their work will face damage to their court and client trust because their reputation for precision and diligence will suffer even though their legal arguments remain valid. The operational system fails to deliver accurate

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results instead of making mistakes in legal arguments (Djankov et al., 2002; Kojola, 2018).

• Wrong Citation Format:

The creation of citations that fail to follow established legal citation rules (The Bluebook or ALWD) needs human intervention to transform them into court-compliant format (Tyler and Bies, 2015; Leiter, 2010).

• Local Rule Description Error of Minor Significance:

The incorrect presentation of page restrictions and font specifications and filing deadlines in court standing orders results in filing rejection (Tyler and Bies, 2015; Leiter, 2010).

• Incorrect Filing Fee Amount:

The submission of an incorrect court filing fee amount results in administrative delays that force users to submit payment again (Tyler and Bies, 2015; Leiter, 2010).

Category IV: De Minimis Hallucinations (The "Stylistic" Class)

The last group includes de minimis non curat lex which refers to hallucinations and inaccuracies that the law does not consider important. The errors exist only in presentation style and have no impact on the legal meaning of the document. The classification of these errors exists because individual flaws do not change legal rights or obligations or procedural steps, but they can combine to show poor attention to detail. The errors lack the ability to create substantial harm or confusion about the document's meaning. The RWHS framework shows these errors as background imperfections which do not threaten the legal soundness of produced work products (Larøi, 2006).

• Grammatical Flaws:

The text contains three types of errors which include subject-verb disagreement and misplaced modifiers and incorrect verb tenses that do not create legal ambiguity (Berberette et al., 2024).

• Non-Critical Names with Minor Typos:

The record contains minor name errors which do not affect the identification of the person (e.g. "John Doe" vs. "John Doe") (Berberette et al., 2024).

• Stylistic Inconsistencies:

The text contains inconsistent use of Oxford commas and formatting that follows all court rules (Berberette et al., 2024).

IV. APPLYING THE FRAMEWORK: FROM TAXONOMY TO ASSESSMENT

The proposed taxonomy evolves into a functional tool through a systematic qualitative evaluation method. The operational framework enables legal professionals and AI developers to advance from basic error detection to complete assessment of AI-generated legal content trustworthiness.

➤ The Assessment Process

The application of the RWHS framework involves a three-stage process that shifts the focus from quantitative error counts to qualitative risk analysis:

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• Identify:

The first requirement demands the detection of AI-generated text elements which could be hallucinations. The detection of hallucinations can be accomplished through three methods which include Retrieval-Augmented Generation (RAG) systems for cross-referencing with verified knowledge bases and expert legal review and multiple AI response consistency checks. The main achievement of this stage consists of identifying statements which lack support from legal authorities or contradict established legal knowledge (Biddle et al., 2020).

• Classify:

The proposed taxonomy (Catastrophic, Substantive, Procedural, or De Minimis) is used to analyze each identified hallucination. The evaluation process for error consequences needs legal professionals to make contextual assessments about potential effects. The classification process demands legal reasoning because it requires assessment of how each particular mistake would affect the legal case (Copeland et al., 2023).

• Evaluate:

The RWHS framework produces a severity profile instead of a single numerical score as its final output. The severity profile shows the number and pattern of hallucinations which appear in different risk categories. The output profile shows one Catastrophic hallucination together with two Procedural hallucinations or it displays a group of Substantive hallucinations. The profile enables users to understand the output risk level and required correction steps right away (Biddle et al., 2020; Copeland et al., 2023).

➤ Comparative Scenario Analysis

The utility of this severity profile becomes evident when comparing hypothetical outputs:

• Scenario A:

An AI generates a legal brief that contains several *Procedural* hallucinations, such as consistent errors in citation format and a minor mistake of a local page-limit rule.

• RWHS Assessment:

The entire situation shows a low risk level. The stylistic and professional elements of documents receive impact from procedural hallucinations, but these issues do not affect the legal content or operational capabilities of the brief. The AI output remains reliable and usable because these issues can be fixed quickly without causing significant problems (Bai et al., 2024).

• Scenario B:

An AI generates a brief that is factually accurate throughout, except for a single *Catastrophic* hallucination: it

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fabricates a crucial filing deadline, stating it is 60 days later than the actual statutory requirement.

• *RWHS Assessment:*

The situation presents an extremely dangerous situation because the error will transform the entire legal framework and produce different judicial outcomes. The fabrication of deadlines would result in critical operational problems because it would cause the loss of essential legal timeframes which makes the output useless even when other parts are accurate. The output needs immediate correction of hallucinations to become reliable (Berrios, 1982; Larøi et al., 2014).

> The Core Argument

The RWHS framework provides step-by-step methods to assess AI content reliability through its framework. The framework assesses each hallucination based on its potential impact instead of using error counts which fail to consider the severity of different hallucination types. The framework enables improved assessment of AI output quality which enables proper system optimization and intervention (Paulsen et al., 2000; Vercammen and Aleman, 2008).

V. THEORETICAL IMPLICATIONS AND DISCURSIVE APPLICATIONS

The Risk-Weighted Hallucination Score (RWHS) framework serves as more than an analytical tool because it creates a fresh perspective which transforms how people discuss and implement AI integration in legal settings. The framework creates three types of effects which unite developers with practitioners and educators and regulators through its shared conceptual base.

➤ For AI Development and Evaluation

The RWHS taxonomy guides AI alignment in legal settings. The current approach to minimize hallucination rates opposes this framework, which prioritizes eliminating Catastrophic and Substantive hallucinations. Developers must create stronger verification tools including RAG systems with legal cross-validation and RLHF systems that punish dangerous mistakes. Model assessment should use weighted metrics valuing models with zero catastrophic errors over those with higher overall accuracy (Butt, 2024; Constantinides et al., 2024).

> For the Legal Profession

The RWHS system provides attorneys with a mental framework and terminology to meet ethical obligations for supervising AI tools (e.g. ABA Model Rule 1.1). The framework helps professionals advance from basic trust/distrust toward evaluation competencies. Lawyers must evaluate AI output to verify accuracy rather than accepting results as true. Risk-based assessments allow lawyers to approve AI for initial drafts while requiring supervision for deadlines and precedents. This enables lawyers to progress from receiving AI assistance to becoming competent AI supervisors (Dokumacı, 2024).

➤ For Legal Education

The implementation of RWHS taxonomy in legal education programs provides essential AI literacy training to students who will enter the legal profession. Students need to develop AI result evaluation skills through legal risk assessment at the same level they learn to verify case authority through Shepardizing. Through the taxonomy students will acquire diagnostic abilities to detect and classify potential hallucinations which they will recognize as catastrophic errors instead of simple mistakes. The training enables students to become proficient in AI usage for legal work because they will learn to use its advantages while protecting themselves from its dangerous consequences. The training program teaches new lawyer's essential skills which help them maintain professional standards when they start practicing law (Constantinides et al., 2024).

➤ For Policy and Regulation

For bar associations and regulatory bodies, RWHS provides a framework for creating effective guidelines on AI use in legal practice. Rather than issuing broad advisories, regulators can use this taxonomy to craft risk-proportionate rules. Guidelines could require human verification checks for AI-generated documents affecting client rights. It provides a basis for distinguishing between acceptable and negligent AI use, informing standards for malpractice insurance and proceedings. This consequence-based framework enables regulation that fosters innovation while protecting legal system's integrity and client interests (Dokumacı, 2024; Butt, 2024).

VI. AVENUES FOR FUTURE INQUIRY

The research framework developed in this paper enables AI ethics studies through legal informatics-based methods. The RWHS needs to complete more academic work and practical training before it can be developed and put into practice. The research presents multiple essential directions for future study which stem from its current findings.

> Empirical Validation of the Risk Taxonomy

The proposed taxonomy needs extensive empirical testing to become a standard because it was developed through legal doctrine and logical reasoning. The Delphi method should be used with legal experts who include practicing attorneys and judges and legal scholars to validate taxonomy. The process of questioning would continue until participants reached agreement about risk category definitions and severity levels and operational limits. The validation process would improve taxonomy through expert feedback to develop an exact severity matrix for legal risk assessment (Mariani et al., 2022).

> The Operationalization Challenge

The main obstacle emerges from converting RWHS from its current human-based conceptual system into a system that uses automated evaluation methods. The upcoming research needs to concentrate on turning taxonomy into an operational system. The development of NLP models and rule-based systems encounters two major obstacles because they need to identify hallucinations while achieving

exact risk category predictions. The creation of a benchmark dataset which includes labeled legal hallucinations together with new AI systems that understand legal context and statement consequences needs to happen. The system needs to advance from basic syntactic pattern recognition to achieve semantic understanding of legal harm (Mariani et al., 2022).

> Domain-Specific Framework Adaptation

The law exists as multiple separate entities because different legal areas produce completely different results from mistakes. The general RWHS framework functions as a starting point which needs modification for application to particular legal areas. Research needs to develop customized taxonomies which fulfill the needs of specific legal domains. A catastrophic tax law would generate both incorrect filing deadline information and fabricated tax code sections and intellectual property law would display non-existent patent prior art elements. RWHS would achieve better precision and effectiveness through the creation of specialized frameworks which address criminal law and corporate law and international law (Lakkshmanan et al., 2024).

VII. CONCLUSION

The legal profession needs to determine if they should artificial intelligence systems to perform their professional work. The promising capabilities of LLMs face an existential threat because they generate false information which standard evaluation methods fail to detect. The research shows that AI trustworthiness in legal practice requires consequence-based evaluation instead of using error counts for assessment. The legal system operates through consequence-based decision making because it focuses on material effects and prejudicial outcomes, so all implemented tools need to meet equivalent standards. The Risk-Weighted Hallucination Score (RWHS) in this paper functions as a qualitative framework which uses consequence-based assessment instead of producing a single numerical value. The RWHS framework enables detailed AI reliability assessment through its taxonomy system which divides hallucinations into four risk categories: Catastrophic, Substantive, Procedural and De Minimis. The system moves beyond basic fact verification to perform critical impact assessments which focus on identifying the most dangerous errors that could result in medical misconduct or rights violations (Vargas-Murillo et al., 2024).

The RWHS serves as a basic conceptual framework which enables developers to create dependable legal AI systems. The framework enables AI developers to create models that follow legal values while legal professionals can achieve technological competence and regulators obtain a framework for future regulatory development. The development of dependable legal AI systems has started at their initial stage (Franceschelli and Musolesi, 2024). The research community needs to work together with developers and practitioners and policymakers to develop and improve this risk-based method for legal AI systems. The legal system together with its clients will protect themselves by making specific efforts to reduce the negative effects of AI (Mensah and Dutta, 2024).

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