Questionnaire: The Applications of Artificial Intelligence (AI) in the Judicial System

1. Years of professional experience: [Select one]

Options	Subtotal	Percentage	
Less than 5 years	52		21.58%
5–10 years	48		19.92%
10–20 years	95		39.42%
Over 20 years	46		19.09%
Valid responses	241		

2. Main types of cases you handle: [Select one]

Options	Subtotal	Percentage	
Criminal cases	13		5.39%
Civil cases	186		77.18%
Administrative cases	5		2.07%
Other	37		15.35%
Valid responses	241		
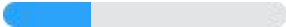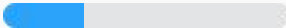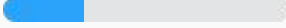
3. Do you support the application of AI in the judicial domain?[Likert scale question]

Average score: 4.23
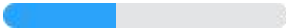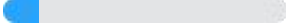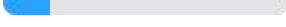
Options	Subtotal	Percentage	
Completely do not support	2		0.83%
Somewhat do not support	8		3.32%
Neutral	51		21.16%
Somewhat support	52		21.58%

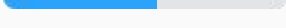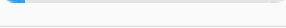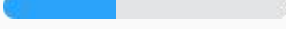|			
Strongly support	128		53.11%
Valid responses	241		

4. In which judicial tasks do you believe AI could play a role? [Select all that apply]

Options	Subtotal	Percentage	
Similar cases retrieval and recommendation	235		97.51%
Legal regulation retrieval	234		97.1%
Determination of the authenticity, legality, and relevance of evidence	76		31.54%
Proof of essential facts	68		28.22%
Identification of key disputed issues	122		50.62%
Fact-finding in cases	69		28.63%
Transcription of court proceedings	196		81.33%
Proofreading legal documents	227		94.19%
Drafting legal documents	161		66.8%
Predicting case outcomes	131		54.36%
Online dispute resolution	115		47.72%
Other	19		7.88%
Valid responses	241		

5. Which judicial tasks do you consider unsuitable or challenging for AI? [Select all that apply]
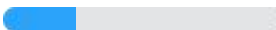
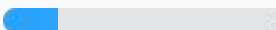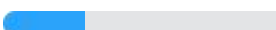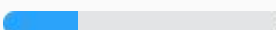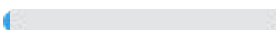| Options	Subtotal	Percentage	
Legal reasoning	96		39.83%
Interpretation and reasoning in judgments	143		59.34%
Calibration of case-related data	31		12.86%
Legal argumentation	96		39.83%
Verification of filing standards	40		16.6%

Understanding complex case scenarios	165		68.46%
Organizing case files	39		16.18%
Legal interpretation and application	54		22.41%
Generating unresolved legal questions	72		29.88%
Exercising judicial discretion	172		71.37%
Conducting online litigation	26		10.79%
Rendering final judgments	163		67.63%
Other	7		2.9%
Valid responses	241		
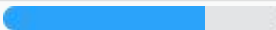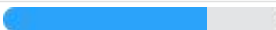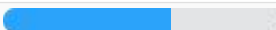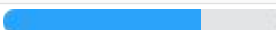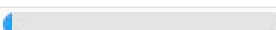
6. What are the limitations of AI in legal reasoning? [Select all that apply]

Options	Subtotal	Percentage	
Difficulties in conducting deductive reasoning	78		32.37%
Difficulties in understanding the specific scenarios of individual cases	212		87.97%
Difficulties in dealing with the ambiguity of legal language	122		50.62%
Difficulties in comprehensively assessing the authenticity, legality, and relevance of evidence	142		58.92%
Difficulties in accurately understanding legal provisions	47		19.5%
Difficulties in understanding the differences in legal traditions and cultural backgrounds between legal systems	110		45.64%
Lack of consideration for moral and social values	196		81.33%
Lack of subjective judgment typically exercised by human judges	181		75.1%
Lack of full understanding and application of judicial discretion	166		68.88%
Other	9		3.73%
Valid responses	241		

7. What are the limitations of AI in legal argumentation? [Select all that apply]

Options	Subtotal	Percentage	
Lack of accurate grasp of case-specific scenarios	175		72.61%
Lack of comprehensive consideration of social, moral, and ethical factors	206		85.48%
Lack of intuitive legal argumentation expression	62		25.73%
Difficulty in accurately understanding legal provisions	46		19.09%
Difficulty in fully combining legal provisions with specific case facts	110		45.64%
Difficulty in recognizing and responding to opposing arguments	105		43.57%
Insufficient logical coherence and rigor in argumentation	69		28.63%
Insufficient persuasive power of legal argumentation	64		26.56%
Other	6		2.49%
Valid responses	241		

8. What are AI's limitations in understanding complex case scenarios? [Select all that apply]

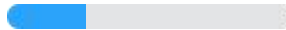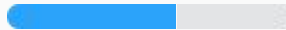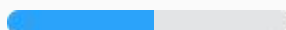| Options	Subtotal	Percentage	
Difficulty in accurately assessing psychological factors	172		71.37%
Difficulty in recognizing and handling emotional factors in cases	171		70.95%
Lack of accurate judgment of complex relationships between parties	174		72.2%
Difficulty in perceiving subtle yet important details of the cases	142		58.92%
Difficulty in handling ethical or moral conflicts in cases	168		69.71%
Difficulty in evaluating the true significance of evidence in a specific scenario	111		46.06%
Difficulty in handling unprecedented scenarios	109		45.23%
Difficulty in dealing with ambiguity and uncertainty in specific cases	120		49.79%
Lack of background knowledge support in long-term historical disputes	143		59.34%
Other	7		2.9%

Valid responses	241	

9. What are AI's limitations in legal interpretation and application? [Select all that apply]

Options	Subtotal	Percentage	
Difficulty in truly understanding the logic of legal provisions	65		26.97%
Difficulty in interpreting ambiguous legal provisions	106		43.98%
Difficulty in explaining legal provisions from different legal systems	69		28.63%
Difficulty in applying multiple interpretative methods	78		32.37%
Difficulty in considering specific case scenarios	173		71.78%
Difficulty in evaluating moral and ethical factors	185		76.76%
Difficulty in addressing legal loopholes	123		51.04%
Difficulty in addressing potential legal conflicts	125		51.87%
Other	6		2.49%
Valid responses	241		

10. What are AI's limitations in exercising judicial discretion? [Select all that apply]

Options	Subtotal	Percentage	
Lack of emotion and intuition to understand human emotional appeals	190		78.84%
Difficulty in balancing legal and ethical considerations	166		68.88%
Difficulty in handling ambiguous or conflicting legal provisions	117		48.55%
Over-reliance on existing data, lack of innovation and creative discretion	112		46.47%
Difficulty in making personalized decisions based on specific scenarios	111		46.06%
Difficulty in perceiving changes in social values and moral norms	126		52.28%

Options	Subtotal	Percentage
Difficulty in adapting to discretion standards in different legal systems	67	27.8%
Lack of ability to directly interact with case parties, making it hard to adjust discretion through communication	144	59.75%
Risk of excessive legal formalism, neglecting substantive justice	119	49.38%
Difficulty in considering the social effects of discretion	125	51.87%
Other	6	2.49%
Valid responses	241	

11. What are AI's limitations in interpretation and reasoning in judicial rulings? [Select all that apply]

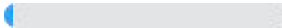| Options	Subtotal	Percentage
Difficulty in adjusting the tone and depth of interpretation and reasoning	155	64.32%
Difficulty in using various reasoning techniques	105	43.57%
Difficulty in accurately explaining causal relationships	73	30.29%
Difficulty in providing targeted responses to disputed issues of different parties	103	42.74%
Difficulty in balancing legal reasoning and emotional reasoning	159	65.98%
Difficulty in adjusting reasoning based on different procedural stages (e.g., first instance, second instance)	82	34.02%
Lack of logical hierarchy	57	23.65%
Other	8	3.32%
Valid responses	241	

12. What are AI's limitations in rendering final judgments? [Select all that apply]

Options	Subtotal	Percentage
Difficulty in achieving a harmonious balance between	173	71.78%

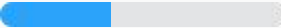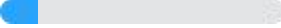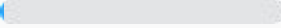|		
emotion, reason, and law		
Difficulty in making moral and value judgments	161	66.8%
Lack of experience of human judges	165	68.46%
Lack of judgment on emerging social issues or areas of law that are unclear	130	53.94%
Lack of ability to predict the long-term social impacts of cases	129	53.53%
Lack of legal professional ethics	96	39.83%
Lack of transparency and explainability	49	20.33%
Difficulty in handling conflicting evidence or ambiguous scenarios	93	38.59%
Difficulty in finding the optimal legal rule	45	18.67%
Difficulty in flexibly adjusting judgments based on courtroom debates and statements from parties	112	46.47%
Other	8	3.32%
Valid responses	241	

13. What ethical issues could arise from the application of AI in courts? [Select all that apply]

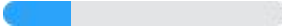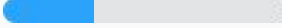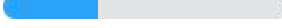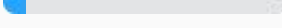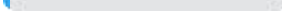| Options	Subtotal	Percentage
Risk of privacy leakage	186	77.18%
Risk of algorithmic bias and discrimination	143	59.34%
Lack of transparency and explainability	76	31.54%
Impact on judicial independence	132	54.77%
Disruption of legal professional ethics	106	43.98%
Risk of human manipulation	148	61.41%
Unclear attribution of legal responsibility	77	31.95%
Reduced public trust in legal fairness	114	47.3%

Other	8		3.32%
Valid responses	241		

14. What is the appropriate scope of AI-assisted judgment? [Select one]

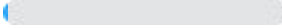| Options	Subtotal	Percentage	
AI provides technical support, with judges retaining final decision-making authority	110		45.64%
AI serves only as a tool, with judges overseeing all processes	94		39%
AI leads in simple cases, while judges decide complex cases	33		13.69%
AI leads in all cases	4		1.66%
Valid responses	241		

15. Do you think AI can replace human judges in rendering final judgments? [Likert scale question]
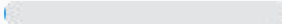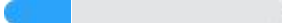
Average score: 2.32

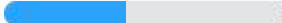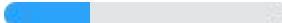| Options	Subtotal	Percentage	
Completely cannot replace	59		24.48%
Somewhat cannot replace	77		31.95%
Neutral	80		33.2%
Somewhat can replace	19		7.88%
Can fully replace	6		2.49%
Valid responses	241		

16. What do you think is the impact of AI on judicial efficiency? [Likert scale question]
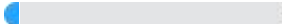
Average score: 4
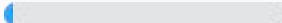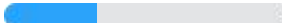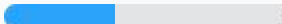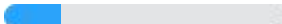
Options	Subtotal	Percentage	
May reduce efficiency	4		1.66%

No impact	2		0.83%
Slightly improve efficiency	57		23.65%
Moderately improve efficiency	105		43.57%
Significantly improve efficiency	73		30.29%
Valid responses	241		

17. What do you think is the impact of AI on judicial quality? [Likert scale question]

Average score: 3.66

Options	Subtotal	Percentage	
May reduce quality	12		4.98%
No impact	8		3.32%
Slightly improve quality	79		32.78%
Moderately improve quality	94		39%
Significantly improve quality	48		19.92%
Valid responses	241		

Thank you for your participation. Your responses will significantly contribute to advancing AI in the judicial field. Best wishes!

Total of average scores: **14.2**