## First International Workshop on AI and Intelligent Assistance for Legal Professionals in the Digital Workplace (LegalAIIA 2019)

Collocated with Seventeenth International Conference on Artificial Intelligence and Law (ICAIL 2019)

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## **INTRODUCTION**

Over the past decade, increased use of machine learning and other artificial intelligence technologies has significantly increased legal professionals' abilities to efficiently access, process, and analyze digital information. AI breakthroughs continue to improve everything from advanced search to information extraction and visualization to data summarization, classification, and review. At the same time, concerns over transparency and the potential limitations of fully automated approaches to problems in the legal space have led to an upsurge of interest in methods that incorporate human intelligence -- the so-called "human-in- the-loop" approach to AI. The debate over using AI as a replacement for humans, as opposed to an augmentation of human abilities, otherwise known as IA or Intelligent Assistance, is over half a century old, but currently the pendulum is swinging back toward the augmentation or IA perspective. However, not all human-AI collaborative effort is guaranteed to be fruitful. Research into the nature, degree, and efficiency of the human contribution to various applications is needed to ensure that the efforts and resources are deployed effectively.

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This workshop provided a platform for examining questions surrounding "AI as human augmentation" for legal tasks (a.k.a. Intelligent Assistance or IA), particularly those related to legal practitioners' interaction with digital information, including ediscovery. The focus of the workshop will be on better understanding the interaction between human and AI capabilities. The primary audience for the workshop will include working attorneys, legal researchers, computer science researchers, and AI providers in the legal industry.

Open questions remain about if/when human interaction is necessary to produce more effective results, if/when the human or AI should take the initiative in the collaboration (i.e., whether IA or AI should dominate), and if/when an increased interpretability and explainability of AI models is necessary for acceptable and successful human-AI collaboration in the legal domain. The ability of systems to analyze and identify exploitable patterns of human interaction and assessment in tasks like EDD (Electronic Data Discovery, or technology-aided discovery) is a significant area of inquiry as well. Empirical comparisons between pure AI versus IA or human-augmented AI – favorable or unfavorable – in the form of user studies or simulations, are encouraged. Proposals on how best to evaluate various methods of human augmentation are also welcome, as are analyses of the ethical implications of adopting AI as replacement versus AI as augmentation in legal applications.