

Chapter 13

Ethical Use of AI in Criminal Justice System

Aravind Ganesan

 <https://orcid.org/0009-0009-0936-6678>

Hindusthan College of Engineering and Technology, India

ABSTRACT

This chapter explores the utilization of generative AI in the criminal justice system, emphasizing the advantages and disadvantages of its applications in risk assessment, evidence analysis, and predictive policing. The chapter focuses on technical challenges such as data bias, algorithm transparency, and the accuracy of AI predictions, all of which can have a significant impact on the fairness and reliability of legal decisions. The preservation of systemic biases, privacy concerns, and striking a balance between personal freedoms and public safety are among the other ethical problems covered. Proposed remedies encompass the adoption of moral protocols, ongoing evaluation and scrutiny of artificial intelligence systems, heightened clarity, and the encouragement of cooperation across many fields. To guarantee that AI in criminal justice enhances fairness and justice, the chapter promotes ongoing, inclusive discussions on its application. It underlines the technology's ability to improve the system while also highlighting the significance of mitigating its hazards.

1. INTRODUCTION TO AI CRIMINAL JUSTICE

The operations and public-facing interactions of law enforcement, courts, and prisons have seen a substantial transformation with the introduction of Artificial Intelligence (AI) into the criminal justice system. With its ability to handle and analyze vast amounts of data quickly and precisely, artificial intelligence (AI) offers unique prospects to improve public safety, streamline legal procedures, and guarantee

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more equal justice results. But this integration also brings up important moral, legal, and societal questions, such as those pertaining to accountability, bias, and privacy.

In the field of criminal justice, artificial intelligence (AI) aims to complement human judgment by providing cutting-edge analytical tools and insights. AI technology has the power to completely change the criminal justice system. From automated risk assessment tools that help determine bail, sentencing, and parole decisions, to predictive police algorithms that try to stop crimes before they happen.

1.1 Overview of AI Technologies in Criminal Justice

1. **Predictive Policing:** AI systems examine crime data to forecast future crime hotspots, including locations and hours. Although these systems can aid in the more efficient use of police resources, there are worries that they could reinforce preexisting prejudices in law enforcement.
2. **Facial Recognition:** Law enforcement agencies utilize AI-powered facial recognition technology to identify suspects by comparing surveillance images with databases of known individuals. Although it may greatly speed up investigations, privacy rights and the accuracy of matches across different populations have become hot topics of discussion.
3. **Automated Risk Assessments:** To help judges decide on bail, sentence, and parole, AI systems assess the likelihood of reoffending in courtrooms. These instruments aim to improve the criminal justice system's objectivity and efficiency by making it less subjective and more effective. However, questions regarding the algorithms' openness and the data that was used to train them continue to exist.
4. **Digital Forensics:** AI methods are employed to look for patterns or evidence relevant to criminal investigations in vast datasets and digital evidence, such as emails, social media posts, and phone records. This can cut down on how long it takes to process the evidence.
5. **Correctional Facility Management:** AI is employed in prisons to keep an eye on the conduct of the inmates, anticipate any problems, and oversee prison operations. The purpose of these applications is to improve jail operations and safety.
6. **Crime Reporting and Analytics:** AI-powered technologies help law enforcement organizations make more strategic and informed decisions by helping the public report crimes anonymously and by studying crime trends and patterns in real-time.
7. **Legal Document Analysis:** Artificial intelligence (AI) systems help attorneys and legal scholars find precedents and pertinent case law more quickly by evaluating and analyzing large volumes of legal documents.

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