

Introduction to Special Issue on Technology and Criminal Justice: Stepping into the Next Stage of Development

WELCOME TO THIS SPECIAL EDITION of *Federal Probation*. Reflecting on my beginnings as a federal probation officer in the 1980s, I recall the technological landscape being vastly different. Back then, we marveled at beepers, dummy computer terminals, and location monitoring equipment that rivaled the traditional ball and chain in size and utility.

It was hard for me and my colleagues to imagine that, within our careers, we would witness the advent of app-filled cell phones, the Internet, GPS location monitoring tools, and advanced drug and DNA testing. Yet, even more astonishing is the next great leap forward in technology already upon us: the age of Artificial Intelligence and related technologies. Understanding the potential and costs of these technologies is crucial for criminal justice professionals, and that's precisely what this special edition is about.

In "AI in Corrections: The Basics and A Way to Experiment," Dr. Amit Shah, Ashit Chandra, and I offer a foundational understanding of Artificial Intelligence for criminal justice officials who may be navigating this terrain for the first time. We present a practical and impactful use case for the technology related to staff training, which is both secure and avoids ethical pitfalls while being scalable for agencies venturing into the AI landscape.

Thomas H. Cohen's exploration of "The Pretrial Dashboards: Using Technology to Provide Judges with an Understanding of Their Pretrial Release and Detention Decisions" sheds light on the fusion of technology and judicial decision-making. By providing judges with invaluable insights, this paradigm shift not only empowers them with data-driven perspectives but also hints at broader implications for the federal pretrial system and beyond.

In "Exploring Probation and Parole Records Using Natural Language Processing," Hadeel Elyazori, Teneshia Thurman, Kevin Lybarger, and Faye S. Taxman unravel the potential of Natural Language Processing (NLP) to unlock the wealth of information within probation records. Their groundbreaking case study showcases how NLP can revolutionize data interpretation, client management, and policy formulation, heralding a new era of evidence-based practices.

Further delving into the realm of AI, Karine Megerdooian, Charles E. Horowitz, and Amy B. Marsh underscore the imperative of harnessing advanced technology to address the complex nexus of substance use disorders and mental health conditions in their article on "Automated Extraction of Substance Use and Co-occurring Disorders from Probation

Records." They discuss tools now available to automate knowledge discovery from narrative texts, enhancing efficiency and equipping probation offices with actionable insights to navigate multifaceted challenges of rehabilitation and community reintegration.

We close this special edition with "Development and Testing of a Digital Coach Extender Platform for MOUD Uptake" by Jessica Vechinski, Dharmaraj Veeramani, Barbara Bowers, and Todd Molfenter. The authors discuss a pioneering pilot aimed at bridging the gap between the criminal legal system and health systems in combating opioid use disorder. Through the development of a Coaching Extender Platform, this initiative promises to democratize coaching techniques, making them scalable, affordable, and ultimately more impactful in facilitating evidence-based treatments.

I hope you enjoy the articles and find that they spark your interest in the power and proper use of emerging technologies to improve the world of criminal justice and community corrections. From the standpoint of a generation hence, even these cutting-edge tools may appear to be baby steps, as primitive as the beeper in my 1980s probation office.

—Matthew G. Rowland