

impact

Nayar Prize II, Phase II Quarterly Progress Report (Q1) January 2018

Project: A Data-Driven Crime Prevention Program
Team: Professors Miles Wernick, Lori Andrews, and Yongyi Yang
Students: David Haro Alonso, Pauline Panayi, Harshini Tippareddy, and Raven Zeer

Progress Summary of Nayar Prize II, Phase II, Quarter 1

In Year Two of the project, we will monitor and evaluate the interventions, improve our risk models, and influence the national debate on the issue of predictive policing. In the first quarter, we have made progress toward each of these goals.

MONITOR AND EVALUATE: We helped the Elgin Police Department (EPD) select a committee to review the information about the people identified by our model to be at highest risk. We attended the committee's first meeting, which followed the procedures that we helped the EPD develop for fair administration of the program.

IMPROVE RISK MODELS: The meeting of the committee revealed ways to improve our model, and we are now implementing them. Because of confidentiality concerns, the EPD provided us with a database that did not include names or personal information, but numeric identifiers called JacketIDs. Our assumption was that each JacketID was associated with one and only one identifiable individual. However, it turned out that some JacketID numbers were assigned to unknown suspects. We are now in the process of eliminating these unknown individuals. In addition, the database given to us by the EPD contained both suspects and arrestees, but we only want to include arrestees in our algorithm. We are closely working with the Public Safety Systems Specialist in the EPD, Joe Bush, to remove instances in which a person was only a suspect and never arrested. As a result of these two changes, we are modifying and testing the algorithm.

INFLUENCE THE NATIONAL DEBATE ON THE ISSUE: On January 8 there was a very positive piece on the CBS program "60 Minutes" about Miles Wernick's crime prevention work in Chicago, illustrating the potential for our Nayar program's success and the importance of bringing the idea to a broader set of cities and towns. The "60 Minutes" piece can be seen at

impact

<https://www.cbsnews.com/news/predicting-crime-in-chicago/>. In addition, we have been involved in two meetings with the National Courts and Sciences Initiative (NCSI), a non-profit organization that trains judges to evaluate scientific and technological issues in court. Because of these meetings, the NCSI has approached us to serve as a resource for judges nationwide and to host a national meeting of judges in 2018 at Chicago-Kent College of Law, where we will train judges to assess algorithms used in the criminal justice system. We will also present the results of our Nayar-funded study. We have also drafted a scientific article and a policy article about our project and about the proper use of algorithms in the criminal justice system. These activities will draw attention to Illinois Tech, highlighting our ability to translate technological breakthroughs into solutions to challenging societal issues of the day.