Taking Out the Guesswork: An Analytical Approach to Police Traffic Stop Contraband Searches
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It is very common for the police to stop a vehicle in US. However, it is relatively rare for the police to search a vehicle for contraband. Our historical data shows that only around 2% of the stopped vehicle will be searched.

Our research builds a model to predict contraband probability of the stopped vehicle will be searched. Our historical data is from 2006 to 2015. This mean that the police find something suspicious.

We found that drivers will tend to drive carefully if they have contraband.

Variable equipment has the most negative coefficient. We found based on what we observed in the test set.

The William G. Bowen and Mary Ellen Bowen Endowed Fund at Denison University.

Our research builds a model to predict contraband probability which can not only help police increase the chance of finding contraband in searched vehicles but also can decrease biases and social disparities among different races and gender.

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