# JUI NERURKAR

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## PROFILE:

Approximately 2 years of experience and training in the field of data science, and analytics. Lawyer. Looking for opportunities to apply my programming, and problem-solving skills to derive actionable insights from data.

#### SKILLS:

R (dplyr), Python (pandas, numpy, XGBoost, matplotlib), SQL, Data Analysis, Causal Inference, Data Profiling, Statistical Modeling, Statistical Inference (Frequentist & Bayesian), Multi-level modeling, A/B testing

#### **INDUSTRY EXPERIENCE:**

## Data Analyst

Center for Policing Equity, New York, USA

(Aug 2020 – Current)

- Conduct statistical data analysis, design, and information flow.
- Produce analysis reports which include data visualization, and regressions using Python/R
- Develop code to generate automated text for digital reports in R and Tableau.
- Communicate findings to senior management, and clients.

## Research Assistant

BetaGov, New York University, New York, USA

(Feb 2019 - May 2020)

- Predict prosecutorial overcharging in Wisconsin
  - ⇒ Led the data science team, ideated, planned and developed the code to identify overcharged criminal charges (~500,000 observations) and cases (~270,000 observations) using SQL and R.
  - ⇒ Implemented a logistic regression model to predict overcharging with 82% accuracy.
- Causal inference model to test efficacy of new policing technique:
  - ⇒ Built a causal inference model and found 3.2% reduction in crimes for areas in Grand Prairie, TX after implementing a new policing technique.
  - ⇒ Communicated actionable insights to executive management on the client side.
- Analyzed survey text using natural language processing (NLP) techniques:
  - ⇒ Leveraged topic modeling techniques using LDA on survey text responses to derive strategies for improving police training.
- Summarized results by preparing written reports.

### **EDUCATION:**

New York University, New York, USA
 Master of Science, Applied Statistics
Government Law College, Mumbai, India
2009 - 2012

Bachelor of Laws

Ramnarain Ruia College, Mumbai, India
Bachelor of Science, Statistics

## PROJECTS:

- Impact of social distancing measures on COVID-19 in USA: [Propensity Modeling, Logistic Regression, Gradient Boosting, Bayesian Causal Forest, Heterogeneous treatment effects]
  - ⇒ Found higher negative impact on human lives of a day's delay in implementing social distancing interventions for counties with high population densities, & low percent change in visits to non-essential businesses.
- Predicting default (credit card payment): [Principal Component Analysis, SVM, Neural Networks]
  - ⇒ Developed machine learning models to predict default in credit card payment using PCA, SVM, & artificial neural networks (ANN) with a recall of 72%
- Examine differences in written opinions of two U.S Federal court: [dplyr, Text Modeling, NLP]
  - ⇒ Built a classifier to investigate the differences in language between written opinions by two U.S. federal courts using dplyr, NLP, & logistic regression with an accuracy of 92.5%

#### **CERTIFICATIONS:**

Mar 2020 Neural Networks & Deep Learning; Jun 2019 SQL for Data Science; Sep 2017 Using Databases with Python; Jul 2017 Python Data Structures