# Felipe Diaz Klaassen

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## **EDUCATION**

# University of Illinois Urbana-Champaign

Ph.D. in Economics

August 2015 – May 2022 Urbana, IL

STEM, Quantitative Economics and Econometrics after 2016

Research: "Essays on the Design of Criminal Justice Institutions,"—Used quasi-random assignment of judges, along with UJIVE, JIVE, LIML, and LASSO IV, to address first-stage overidentification and estimate causal effects of alternative criminal punishments. Event study analysis of the priming of judges to assess ability to pay. Extended traditional model of bargaining under imperfect information to study the trade-offs of trial length.

Fields: Labor Economics, Applied Microeconomics, Political Economy

University of Chile

August 2013 – May 2015

M.S. in Economics Santiago, Chile

Master's Thesis: "Costly Information Acquisition and Voluntary Voting"

Major GPA: 6.5/7.0 (equiv 4.0/4.0), Maximum Distinction

B.S. in Industrial Engineering | Major GPA: 6.1/7.0 (equiv 4.0/4.0), Maximum Distinction

#### PROFESSIONAL EXPERIENCE

# Banco de Crédito e Inversiones (BCI)

Process Engineer, Risk Management Team

January 2015 – July 2015 Santiago, Chile

• Development of trading desks' manuals for Volcker Rule compliance.

IM Trust August 2012 – July 2013

Analyst, Strategy Department

Santiago, Chile

- Asset allocation with multi-factor models and Black-Litterman approach using Bloomberg API, Matlab and VBA.
- Assess portfolio risk exposure with VaR using Matlab.

## **ACADEMIC EXPERIENCE**

#### University of Illinois Urbana-Champaign

Teaching Assistant of "Big Data Analytics", Gies College of Business

January 2020 - present

• Topics covered: data visualization, machine learning, regression analysis, randomized trials,

LASSO, Trees, Random Forests, Boosting, Neural Networks, A/B testing, R programming within AWS.

#### Research Assistant, Department of Economics

May 2016 - Dec 2020

- Solve dynamic model of the production of health and mortality using Nelder-Mead with soft constraints *Urbana, IL* and simulated annealing, in Matlab and R.
- Built and geocoded panel dataset of FOIA'd firearms licenses and gun-related accidents using Stata and Python.
- Causal inference with few clusters (wild cluster bootstrap/score bootstrap) using Stata.
- Data analysis and spatial visualization using R and Python.

# **SKILLS**

- R (Advanced), Stata (Advanced), Python, Matlab, Java, SQL, TensorFlow, LATEX
- Econometrics, Causal Inference, Machine Learning, Web Scraping, Data Visualization
- RCTs, Difference-in-Differences, Synthetic Control, Regression Discontinuity, Matching, LASSO, Elastic Nets, Double ML

# **RESEARCH**

- Crime and (Monetary) Punishment
- Quorum Rules in a Multiple-Issue Referendum (with Ricardo Piqué)
- Value-Added in the Criminal Justice System (with Rebecca Thornton) Empirical Bayes estimation of value added by defense attorneys.
- Police Violence and Crime (with Jennifer Doleac, Anna Kyriazis, and Kelsey Pukelis)
   Python script chain linking Google trends to make them comparable across time and space.

# **SCHOLARSHIPS AND AWARDS**

# **LANGUAGES**

- Graduate Fellowship, Department of Economics, UIUC
- Summer Research Award, Department of Economics, UIUC
- List of Teachers Ranked as Excellent, UIUC

- English (fluent)
- Catalan (intermediate)
- Spanish (native)

# **REFERENCES**

Professor Rebecca Thornton UIUC, Department of Economics rebeccat@illinois.edu

Professor Alexander Bartik UIUC, Department of Economics abartik@illinois.edu

Professor Benjamin Marx UIUC, Department of Economics benmarx@illinois.edu