# MAXIMILIAN J. VOGLER

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- Highly skilled in deep learning, predictive ML, causal inference and their intersection
- 6+ years of coding experience (e.g. Python, Java) in both data analysis and computational modeling

#### EDUCATION

## Princeton University

PhD in Economics Dissertation Topics: Deep Learning, Machine Learning, Applied and Computational Macroeconomics

Princeton University MA in Economics	2017
University of St. Gallen, Switzerland	2015
BA in Economics   BA in Business Administration	

## **RESEARCH PROJECTS**

# A Deep Learning Algorithm For High-Dimensional Dynamic Programming Problems

• Develops a new Deep Learning approach for economic models to solve differential equations with up to 75 continuous state variables.

### Topic Modeling for the Economic Reports of the President

• Utilizes ML approaches to Natural Language Processing to analyze the content of the Economic Reports of the President in order to identify the causal relationship between taxes and growth.

#### Government Policies in a Granular Open Economy

• Estimates and investigates the economic costs and benefits of antitrust, trade and industrial policies in a trade model focused on firm size.

### Finding the Sources of Wealth Inequality

• Builds a structural economic model to analyze the underlying sources of increasing wealth inequality.

# RESEARCH AND LEADERSHIP EXPERIENCE

#### Princeton University

Graduate Teaching Assistant

• Teach 80 undergraduate students each year in Microeconomics, Macroeconomics and Econometrics.

#### Research Assistant

With Professors Oleg Itskhoki, Ben Moll and Esteban Rossi-Hansberg

- Coded and estimated trade and macroeconomic models with 5,000+ lines of code.
- Cleaned, merged and pre-processed large tax data sets and estimated changes in income inequality.

### HONORS AND AWARDS

Princeton University Graduate Fellowship	2015 - Present
<b>Princeton University Graduate School Teaching Prize</b> - top $0.2\%$ of graduate teachers	2020
German National Merit Foundation - top 0.5% of German students	2011 - 2017

### SKILLS AND INTERESTS

Programming Languages: Python (TensorFlow, Scikit-Learn, Pandas), Java, C, Matlab, SQL, Stata
Statistics and Machine Learning: Causal Inference (Experiments, DiD, IV, RDD), Deep Learning, Predictive
Modeling (Random Forests, Boosted Trees, SVM), ML for Causal Inference (Causal Trees)

Interests: Squash, Traveling, Windsurfing, Hiking, Taking CS Courses, Reading, Duolingo

2017 - Present

2016 - 2019

Expected 2021

• 7+ years experience in economic modeling/analysis

• Talented communicator awarded the Graduate

• CS coursework (e.g. data structures, algorithms)

Student Teaching Prize