# Timothy R. McDade

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Website: https://trmcdade.github.io/ GitHub: https://github.com/trmcdade

#### Education

PhD: Duke University

2018 -

Political Science: Political Economy, Quantitative Methods All but dissertation, expected graduation May 2022.

Committee: Erik Wibbels (chair), Michael Munger, Layna Mosley, Scott de Marchi.

MA: Duke University

Tsinghua University

2018 -

Political Science. Expected graduation Fall 2021.

BS, Honors: The College of William & Mary Mathematics, Chinese Language & Literature 2012

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2010

Coursework in Chinese Language and Culture

# Work Experience

Duke University: Durham, NC, USA

2018 -

Research Associate, DevLab@Duke, Machine Learning for Peace

2018 -

- Scraped international media sources to construct an event data set as input to a natural language processing algorithm that predicts democratic backsliding, civil society closures, and authoritarian influence across the world.
- Constructed data set of economic indicators for inclusion in event prediction model.
- Managed undergraduate research assistants.

Microsoft: Beijing, China and Redmond, WA, USA

2012 - 2018

2014 - 2018

- Data Scientist, Microsoft Azure Business Analytics
   Led market analytics for China Azure.
- Relocated to Beijing in August 2016 to provide deeper in-country context, make specific recommendations based on the geopolitical climate, and improve the relationship between the Chinese and USA Azure teams.
- Built analytical tools to inform executive decisions in these key areas:
  - Strategy to improve market standing as a foreign company in China: advocated the improvement of web direct business (B2C) to capitalize on the scalable nature of cloud computing.
  - Price changes based on data from competitive analyses and price elasticity calculations
  - Mitigation of data center capacity constraints based upon analysis of customer usage trends.
  - More effective marketing campaigns via lifetime value analysis and cost-per-trial conversion analysis.
  - Introduction of machine learning models to reduce customer churn and identify top tier customers.
- Delivered data-driven and market-based insights that influenced business decisions leading to 731% growth in Microsoft Azure China's monthly revenue over 27 months.
- Led a team of four on-site and offshore contractors.

	Program Manager, MACH IT Rotation Program Delivered four external consulting contracts for \$337,500 revenue.	2012 – 2014	
	The College of William & Mary: Williamsburg, VA, USA Researcher, Computational Science in the Mathematical Sciences Researcher, W&M Global Business Immersion	2010 – 2012 2011 – 2012 2010 – 2011	
Publications	Timothy R. McDade. What can insurance tell us about the capitol mob? <i>I</i> January 2021 (link here).	Foreign Policy,	
	Timothy R. McDade. Who's surprised by gamestop? not me!, February 2021 (link here).		
Working Papers	Timothy R. McDade. Dissertation, Part I: Economic Insurance and Protest Mob	oilization, 2021	
	Timothy R. McDade. Dissertation, Part II: The Effect of Ownership Concentration on Government Bond Yields, 2021		
	Timothy R. McDade. Dissertation, Part III: China's Financial Market Statecraft, 2021		
	Timothy R. McDade. Multilateral constraints on chinese behavior in south china sea territorial disputes. <i>Duke Global Working Paper Series</i> , (19), March 2020 (link here or here).		
	Timothy R. McDade, Layna Mosley, and B Peter Rosendorff. Political shocks and sovereign borrowing, 2021		
	Timothy R. McDade, Mateo Villamizar Chaparro, Molly Jacobs, and Michelle Corea. The effect of covid-19 and economic stimulus on food security, 2021		
Languages	Mandarin Chinese (advanced) Spanish (advanced reading, intermediate speaking)		
Skills	Technical skills: - Python, R, SQL, Unix/Bash, Git, Stata, Matlab, LaTeX, Microsoft Office - Quantitative analysis, time series analysis, advanced regression and stati		

- Quantitative analysis, time series analysis, advanced regression and statistics, financial analysis, forecasting, machine learning, factor analysis, natural language processing, data management

#### Business skills:

- Synthesis of academic, technical, business, and strategic material to recommend action to varied groups of stakeholders.
- Synthesize, organize, and evaluate huge amounts of data and evidence both quantitative and qualitative.
- Detail-oriented, but able to connect to the bigger picture.

- Project and people management.
- Use evidence to advocate a position or strategy.
- Construct evidence-based theories of change.

# Honors, Distinctions, and Awards

### **Duke University**

- Bradley Foundation Grant Funding (\$7,000): 2021.
- Walter T. Molano Research Grant (\$3,000): 2021.
- Departmental Fellowship, Department of Political Science: 2018, 2019, 2020, 2021.
- Summer Research Fellowship, Duke Graduate School: 2019, 2020.
- Summer Research Fellowship, Department of Political Science: 2021.
- Russell Sage Foundation and Alfred P. Sloan Foundation: Summer Institute in Computational Social Science: 2019.

### The College of William & Mary

- Monroe Scholar: ranked in the top 5% of Class of 2012 admitted students. Awarded summer research fellowship (\$3,000).
- Dean's List: Fall 2011 & Spring 2012.

# Invited **Presentations**

February 2020: UT Austin, Restraint and National Security Conference

### **Departmental** Service

#### **Duke University**

Teaching Assistant, Professor Michael Munger	2020 - 2021
Teaching Assistant, Professor Alexander Rosenberg	2021

Research Assistant, Professor Erik Wibbels	2019 - 2021
Research Assistant, Professor Scott de Marchi	2018 - 2019

# **Teaching**

# Thesis Writing for MA Students (PS 791) Introduction to Political Economy (PS 145)

Fall 2021 Fall 2020

### **Professional Affiliations**

American Political Science Association

International Studies Association