## 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 2022.

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

MA: Duke University

2018 -

Political Science. Expected 2021.

BS, Honors: The College of William & Mary

2012

Mathematics and Chinese Language & Literature

Tsinghua University

2010

Coursework in Chinese Language and Culture

## Work Experience

DevLab@Duke: Durham, NC, USA

2018 -

Research Associate, 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 space 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

Data Scientist, Microsoft Azure Business Analytics

2014 - 2018

- 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 contracts resulting in \$337,500 revenue.	14
	The College of William & Mary: Williamsburg, VA, USA  Researcher, Computational Science in the Mathematical Sciences  Researcher, W&M Global Business Immersion  2010 – 20  2010 – 20	12
Publications	Timothy R. McDade. What can insurance tell us about the capitol mob? Foreign Police January 2021 (link here).	cy,
	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 Mobilization, 20	21
	Timothy R. McDade. Dissertation, Part II: The Effect of Ownership Concentration on Government Bond Yields, 2021	n-
	Timothy R. McDade. Dissertation, Part III: China's Financial Market Statecraft, 2021	
	Timothy R. McDade. Multilateral constraints on chinese behavior in south china sea territor disputes. <i>Duke Global Working Paper Series</i> , (19), March 2020 (link here or here).	ial
	Timothy R. McDade, Layna Mosley, and B Peter Rosendorff. Political shocks and sovereighborrowing, 2021	gn
	Timothy R. McDade, Mateo Villamizar Chaparro, Molly Jacobs, and Michelle Corea. T effect of covid-19 and economic stimulus on food security, 2021	he
Languages	Mandarin Chinese (advanced), Spanish (advanced)	
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#### **Skills**

#### Technical skills:

- Python, R, SQL, Unix/Bash, Git, Stata, Matlab, LaTeX
- 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

Research Assistant, Professor Scott de Marchi
Research Assistant, Professor Erik Wibbels
Teaching Assistant, Professor Michael Munger
Teaching Assistant, Professor Alexander Rosenberg

2018 - 20192019 - 2021

2020 - 2021 2021

### **Teaching**

Introduction to Political Economy (Fall 2020, Political Science 145)

## Professional Affiliations

American Political Science Association International Studies Association