

Timothy R. McDade

tim.mcdade@duke.edu || +1.443.564.6116

Website: <https://trmcdade.github.io/>

GitHub: <https://github.com/trmcdade>

Education	PhD: Duke University	2022
	Political Science: Political Economy, Quantitative Methods	
	Committee: Erik Wibbels (chair), Scott de Marchi, Michael Munger, Layna Mosley	
	AM: Duke University	2021
	Political Science: Political Economy, Quantitative Methods	
	BS, Honors: The College of William & Mary	2012
	Mathematics, Chinese Language & Literature	
	Tsinghua University	2010
	Coursework in Chinese Language and Culture	

Work Experience	Duke University: Durham, NC, USA	2018 – 2022
	<i>Research Associate, DevLab@Duke, Machine Learning for Peace</i>	2018 – 2021
	<ul style="list-style-type: none">- 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
	<i>Data Scientist, Microsoft Azure Business Analytics</i>	2014 – 2018
	<ul style="list-style-type: none">- 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:<ul style="list-style-type: none">- 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.	
	<i>Program Manager, MACH IT Rotation Program</i>	2012 – 2014
	Delivered four external consulting contracts for \$337,500 revenue.	

The College of William & Mary: Williamsburg, VA, USA	2011 – 2012
Researcher, Computational Science in the Mathematical Sciences	2011 – 2012
Researcher, W&M Global Business Immersion	2011 – 2012

Skills	<p>Technical skills:</p> <ul style="list-style-type: none"> - Python, R, SQL, Stata, Matlab, Unix/Bash, Git, LaTeX, Microsoft Office, and more - Familiar with a broad variety of data sources, including Bloomberg, FactSet, and more - Comfortable with a variety of databases including MongoDB and Azure SQLDB - Strong knowledge of probability, statistics, and quantitative analysis, including time series analysis, advanced regression and statistics, financial analysis, forecasting, machine learning, factor analysis, natural language processing, and data management <p>Business skills:</p> <ul style="list-style-type: none"> - Synthesize, organize, and evaluate huge amounts of data and evidence — both quantitative and qualitative, from academic, technical, business, and strategic sources, to recommend action to varied stakeholders. - Firm grasp of how politics affects economics (and vice versa) at the global, state, and firm level. - Constructing evidence-based theories of change and advocating a position or strategy. - Detail-oriented, but able to connect to the bigger picture. - Project and people management.
---------------	---

Languages	<p>Mandarin Chinese (advanced)</p> <p>Spanish (advanced reading, intermediate speaking)</p>
------------------	---

Publications	<p>Timothy R. McDade. What can insurance tell us about the capitol mob? <i>Foreign Policy</i>, January 2021 (link here).</p> <p>Timothy R. McDade. Who's surprised by gamestop? not me!, February 2021 (link here).</p>
---------------------	---

Working Papers	<p>Timothy R. McDade. Dissertation, Part I: Economic Insurance and Protest Mobilization, 2021</p> <p>Timothy R. McDade. Dissertation, Part II: The Effect of Ownership Concentration on Government Bond Yields, 2021</p> <p>Timothy R. McDade. Dissertation, Part III: China's Financial Market Statecraft, 2021</p> <p>Timothy R. McDade, Layna Mosley, and B Peter Rosendorff. Political shocks and sovereign borrowing, 2021</p> <p>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).</p>
-----------------------	--

Timothy R. McDade, Mateo Villamizar Chaparro, Molly Jacobs, and Michelle Corea. The effect of covid-19 and economic stimulus on food security, 2021

Timothy R. McDade. Analysis and simulation of an optimal control model of an oyster population displaying an allee effect. *Undergraduate Honors Theses, William & Mary*, (499), 2012

Honors, Distinctions, and Awards

Duke University

- Walter T. Molano Research Grant (\$2,000): 2022.
- 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

<i>Teaching Assistant, Professor Peter Feaver</i>	2022
<i>Teaching Assistant, Professor Alexander Rosenberg</i>	2021
<i>Teaching Assistant, Professor Michael Munger</i>	2020 – 2021
<i>Research Assistant, Professor Michael Munger</i>	2021 – 2022
<i>Research Assistant, Professor Erik Wibbels</i>	2019 – 2021
<i>Research Assistant, Professor Scott de Marchi</i>	2018 – 2019

Teaching

Foreign Policy of the US (PS 365)	Spring 2022
Thesis Writing for MA Students (PS 791)	Fall 2021
Introduction to Political Economy (PS 145)	Fall 2020

Professional Affiliations

American Political Science Association
International Studies Association