

## Timothy R. McDade

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

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

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<b>Education</b>	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	

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<b>Work Experience</b>	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"><li>- 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.</li><li>- Constructed data set of economic indicators for inclusion in event prediction model.</li><li>- Managed undergraduate research assistants.</li></ul>	
	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"><li>- Led market analytics for China Azure.</li><li>- 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.</li><li>- Built analytical tools to inform executive decisions in these key areas:<ul style="list-style-type: none"><li>- 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.</li><li>- Price changes based on data from competitive analyses and price elasticity calculations.</li><li>- Mitigation of data center capacity constraints based upon analysis of customer usage trends.</li><li>- More effective marketing campaigns via lifetime value analysis and cost-per-trial conversion analysis.</li><li>- Introduction of machine learning models to reduce customer churn and identify top tier customers.</li></ul></li><li>- 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.</li><li>- Led a team of four on-site and offshore contractors.</li></ul>	
	<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

<b>Skills</b>	<p>Technical skills:</p> <ul style="list-style-type: none"> <li>- Python, R, SQL, Stata, Matlab, Unix/Bash, Git, LaTeX, Microsoft Office, and more</li> <li>- Familiar with a broad variety of data sources, including Bloomberg, FactSet, and more</li> <li>- Comfortable with a variety of databases including MongoDB and Azure SQLDB</li> <li>- 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</li> </ul> <p>Business skills:</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- Firm grasp of how politics affects economics (and vice versa) at the global, state, and firm level.</li> <li>- Constructing evidence-based theories of change and advocating a position or strategy.</li> <li>- Detail-oriented, but able to connect to the bigger picture.</li> <li>- Project and people management.</li> </ul>
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<b>Languages</b>	<p>Mandarin Chinese (advanced)</p> <p>Spanish (advanced reading, intermediate speaking)</p>
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<b>Publications</b>	<p>Timothy R. McDade. What can insurance tell us about the capitol mob? <i>Foreign Policy</i>, January 2021 (link <a href="#">here</a>).</p> <p>Timothy R. McDade. Who's surprised by gamestop? not me!, February 2021 (link <a href="#">here</a>).</p>
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<b>Working Papers</b>	<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 <a href="#">here</a> or <a href="#">here</a>).</p>
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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 (\$1,500): 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