

## 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 program: Duke University Political Science: Political Economy, Quantitative Methods Passed qualifying and preliminary examinations.	2018 –
	BS, Honors: The College of William & Mary Mathematics and Chinese Language & Literature	2008 – 2012
	Tsinghua University Coursework in Chinese Language and Culture	2010

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<b>Work Experience</b>	DevLab@Duke: Durham, NC, USA	2018 –
	<i>Research Associate, Machine Learning for Peace</i>	2018 –
	<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 space 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> Delivered four contracts resulting in \$337,500 revenue.	2012 – 2014
	The College of William & Mary: Williamsburg, VA, USA	2010 – 2012
	<i>Researcher, Computational Science in the Mathematical Sciences</i>	2011 – 2012
	<i>Researcher, W&amp;M Global Business Immersion</i>	2010 – 2011

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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>
<b>Working Papers</b>	<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> <p>Timothy R. McDade. Economic determinants of protest, 2021</p> <p>Timothy R. McDade. Ownership concentration of government bond markets, 2021</p> <p>Timothy R. McDade, Layna Mosley, and B Peter Rosendorff. Political shocks and sovereign borrowing, 2021</p> <p>Timothy R. McDade, Mateo Villamizar Chaparro, Molly Jacobs, and Michelle Corea. The effect of covid-19 and economic stimulus on food security, 2021</p>
<b>Languages</b>	Mandarin Chinese (advanced), Spanish (advanced)
<b>Skills</b>	<p>Technical skills:</p> <ul style="list-style-type: none"> <li>- Python, R, SQL, Unix/Bash, Git, Stata, Matlab, LaTeX</li> <li>- Quantitative analysis, time series analysis, advanced regression and statistics, forecasting, machine learning, factor analysis, natural language processing, data management</li> </ul> <p>Business skills:</p> <ul style="list-style-type: none"> <li>- Synthesis of academic, technical, business, and strategic material to recommend action to varied groups of stakeholders.</li> <li>- Synthesize, organize, and evaluate huge amounts of data and evidence — both quantitative and qualitative.</li> <li>- Detail-oriented, but able to connect to the bigger picture.</li> <li>- Project and people management.</li> <li>- Use evidence to advocate a position or strategy.</li> <li>- Construct evidence-based theories of change.</li> </ul>
<b>Honors, Distinctions, and Awards</b>	<p>Duke University</p> <ul style="list-style-type: none"> <li>- Bradley Foundation Grant Funding (\$7,000): 2021.</li> <li>- Walter T. Molano Research Grant (\$3,000): 2021.</li> <li>- Departmental Fellowship, Department of Political Science: 2018, 2019, 2020.</li> <li>- Summer Research Fellowship, Duke Graduate School: 2019, 2020.</li> <li>- Summer Institute in Computational Social Science, Russell Sage Foundation and Alfred P. Sloan Foundation: 2019.</li> </ul> <p>The College of William &amp; Mary</p> <ul style="list-style-type: none"> <li>- Monroe Scholar: ranked in the top 5% of Class of 2012 admitted students. Awarded summer research fellowship (\$3,000).</li> <li>- Dean's List: Fall 2011 &amp; Spring 2012.</li> </ul>

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<b>Invited Presentations</b>	February 2020: UT Austin, Restraint and National Security Conference
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<b>Departmental Service</b>	Duke University	
	<i>Research Assistant, Professor Scott de Marchi</i>	2018 – 2019
	<i>Research Assistant, Professor Erik Wibbels</i>	2019 – 2021
	<i>Teaching Assistant, Professor Michael Munger</i>	2020 – 2021
	<i>Teaching Assistant, Professor Alexander Rosenberg</i>	2021

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<b>Teaching</b>	Political Science 145: Introduction to Political Economy (Fall 2020)
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<b>Professional Affiliations</b>	American Political Science Association International Studies Association
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