

Timothy R. McDade

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

Work Experience	DevLab@Duke: Durham, NC, USA	2018 –
	<i>Research Associate, Machine Learning for Peace</i>	2018 –
	<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 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
	<i>Data Scientist, Microsoft Azure Business Analytics</i>	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.

<i>Program Manager, MACH IT Rotation Program</i>	2012 – 2014
Delivered four contracts resulting in \$337,500 revenue.	

The College of William & Mary: Williamsburg, VA, USA	2010 – 2012
<i>Researcher, Computational Science in the Mathematical Sciences</i>	2011 – 2012
<i>Researcher, W&M Global Business Immersion</i>	2010 – 2011

Publications	Timothy R. McDade. What can insurance tell us about the capitol mob? <i>Foreign Policy</i> , January 2021 (Link here .)
Working Papers	<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> <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>
Languages	Mandarin Chinese (advanced), Spanish (advanced)
Skills	<p>Technical skills:</p> <ul style="list-style-type: none"> - Python, R, SQL, Unix/Bash, Git, Stata, Matlab, LaTeX - Quantitative analysis, time series analysis, advanced regression and statistics, forecasting, machine learning, factor analysis, natural language processing, data management <p>Business skills:</p> <ul style="list-style-type: none"> - 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	<p>Duke University</p> <ul style="list-style-type: none"> - Grant Funding, Bradley Foundation (\$7,000): 2021. - Summer Research Fellowship, Department of Political Science (\$3,000): 2021. - Departmental Fellowship, Department of Political Science: 2018, 2019, 2020. - Summer Research Fellowship, Duke Graduate School: 2019, 2020. - Summer Institute in Computational Social Science, Russell Sage Foundation and Alfred P. Sloan Foundation: 2019. <p>The College of William & Mary</p> <ul style="list-style-type: none"> - 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
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Departmental Service	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

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