

Timothy R. McDade

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

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| 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 |
| | <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 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 |

**Honors,
Distinctions,
and Awards**

Duke University

- 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.

The College of William & Mary

- Monroe Scholar: ranked in the top 5% of Class of 2012 admitted students. Awarded funding for summer research.
- Dean's List: Fall 2011 & Spring 2012.

Languages

Mandarin Chinese (advanced), Spanish (advanced)

Skills

Technical skills:

- 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

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.

Publications**Working
Papers****Presentations**

February 2020: UT Austin, Restraint and National Security Conference

**Departmental
Service**

Duke University

Research Assistant, Professor Scott de Marchi 2018 – 2019*Research Assistant, Professor Erik Wibbels* 2019 – 2021*Teaching Assistant, Professor Michael Munger* 2020 – 2021*Teaching Assistant, Professor Alexander Rosenberg* 2021**Teaching**

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

**Professional
Affiliations**American Political Science Association
International Studies Association