

1. Name (first and last)

Text Response

Miguel Garza Casado

Statistic

Value

Total Responses

1

2. Email

Text Response

garzacasado.1@osu.edu

Statistic

Value

Total Responses

1

3. Contact Phone

Text Response

773-899-1737

Statistic

Value

Total Responses

1

4. In Fall 2018 you will consider yourself to be a:

#	Answer	Bar	Response	%
1	VT Freshmen Undergraduate Student		0	0%
2	VT Sophomore Undergraduate Student		0	0%
3	VT Junior Undergraduate Student		0	0%
4	VT Senior Undergraduate Student		0	0%
5	Between Undergrad and Graduate school		0	0%
6	Graduate school		1	100%
	Total		1	

Statistic	Value
Min Value	6
Max Value	6
Mean	6.00
Variance	0.00
Standard Deviation	0.00
Total Responses	1

5. What degree(s) and major(s) are you pursuing along with institution?

Text Response
PhD in Political Science; The Ohio State University

Statistic	Value
Total Responses	1

6. List any Minors you are pursuing.

Text Response

Major: Comparative Politics; Minor: Political Economy

Statistic	Value
Total Responses	1

7. List any honors and/or awards received:

Text Response

The Ohio State University Department of Political Science Grant for Graduate Students 2016 (\$3000) & 2018 (\$1350)

Statistic	Value
Total Responses	1

8. Currently we have 1 program accepting applications which includes:

#	Answer		Total Responses
15	Data Science for the Public Good	0	0
	Total	0	-

Statistic	Data Science for the Public Good
Min Value	-
Max Value	-
Mean	0.00
Variance	0.00
Standard Deviation	0.00
Total Responses	-

9. Essay (up to 500 words): “What do you want to get out of this experience?”

Text Response

I strongly believe that data-driven policies are key for sustainable and inclusive long-term growth. In today’s world where everything can be quantified it is crucial for governments and private firms to have the most reliable and trained team to conduct the data analysis that will inform the policies or actions, in order to maximize welfare. We as academics have a unique opportunity to contribute to this process not only with our knowledge but with our data skills. I believe that the Data Science for the Public Good Program is the perfect opportunity for academics – like me – who want to go the extra step and use their expertise to contribute to the creation and development of data-driven policies. The Data Science for the Public Good Program will deepen my expertise in various ways. First, by allowing me to diversify my interests and expertise. The cross-disciplinary approach offered by the program will enrich the way I see the problems and will feed a new way of interacting with them to create more innovative and informed solutions. Having the opportunity to engage with faculty and mentors from other fields will also make this a unique experience. Second, further quantitative training. As a PhD Candidate, I am aware that statistical and programming techniques and tools are in constant renewal. Having the opportunity to engage with mentors and fellow participants to learn about the most cutting-edge tools and data sets, combined with the opportunity to network with peers and other organizations, will allow me to stay up-to-date and on the frontier of data science. Third, engagement with the community. A successful program is one that not only proposes a solution or policy to a specific concern, but one that constructs this solution using input from the receiving community. Having this constant communication between both sides will enrich the decision-making process and will bring different angles of study to the table. This program will provide a perspective from outside the ivory tower of academia and will give me an opportunity to interact with the communities affected by the policies my research could inform. In short, there are several aspects that make the Data Science for the Public Good Program especially appealing to me. In particular, I value engagement with communities when looking for solutions as well as utilizing the most relevant and up-to-date statistical tools to ensure an accurate and well-informed data-driven decision-making process. These two aspects of the program, along with guidance from mentors and Center fellows will expand my expertise to diverse fields as well as help me to develop a different way of approaching and solving real problems.

Statistic	Value
Total Responses	1

10. Essay (up to 500 words): "Please describe any previous research experience and/or work experience you may have.”

Text Response

My work experience includes working in the Mexican government, in a pre-presidential campaign in Mexico and in a Policy Research Institute in the United States. As an Advisor to the Minister of Finance in Mexico I was solely responsible for developing and maintaining all material for the Minister’s use in presentations, speeches and other events he attended, including the G20 meeting in 2012 in Los Cabos. I led one of the teams in charge of preparing information for the Minister’s Congressional hearing in 2012, and I assisted the Minister in budget negotiations with Congressmen. My role in the Ernesto Cordero Pre-presidential campaign was to write detailed policy memos with policy recommendations and background information for the Pre-candidate at each stop of his campaign. Two particular assignments during this time were to analyze survey data to develop better programs for vulnerable populations in Mexico and to evaluate the previous government’s policies and to recommend improvements or new alternatives for the 2012-2018 policy platform. In the United States I was a Research Associate in the International Development, Evaluation and Research branch of the American Institutes for Research (AIR). My role there consisted of three primary components. First, I did field work which consisted of survey development and implementation in the field. Second, I conducted data cleaning and analysis of the survey data. And third, I wrote reports for clients and academic papers for the diverse projects I was part of. These projects covered a wide range of topics such as improving agricultural production in Kenya, evaluating an early childhood Cash Transfer Program in Zambia, a gender equality project in Nigeria and three education projects: one in Uganda, one in Honduras and one in Kyrgyzstan and Tajikistan. Each project had a different client such as DFID-UK, UNICEF, Women for Women International and the National governments of Honduras, Kyrgyzstan and Tajikistan. For the gender equality project in Nigeria in particular, I was in charge of developing the survey that was administered in the field, and I had the opportunity to travel to the region of interest to pilot my survey and supervise the first wave of data collection. I also have academic research experience, beginning before my enrollment at the Ohio State University as a PhD student. As a research assistant for Professor Damon Jones at the University of Chicago, Harris School of Public Policy and the National Bureau of Economic Research (NBER), I assisted Professor Jones on a project developing a statistical proof to test the monotonicity assumption used in instrumental variables analysis. Complementary to this, I supported Professor Jones on a separate project analyzing whether property tax due dates affected family consumption and savings plans.

Statistic	Value
Total Responses	1

11. Essay (up to 500 words): "Please describe your background (courses taken, research projects, etc.) in statistics and mathematics."

Text Response

My training in statistics and mathematics started as an undergraduate student at the Instituto Tecnológico Autónomo de México (ITAM). While pursuing a BA in Economics I took courses such as Statistical Inference, Econometrics, Applied Microeconometrics and Applied Macroeconometrics. Complementary to these statistics courses were the three semester sequence of Calculus (univariate and multivariate) and the Mathematics Applied to Economy course. These courses provided me with a solid foundation for further training at the University of Chicago and at The Ohio State University. While pursuing my Masters in Public Policy at the Harris School of Public Policy at the University of Chicago I deepened my training in statistics and mathematics by taking courses such as Statistical Theory and Analysis in the Statistics department, Introduction to Analysis and Linear Algebra in the Mathematics department and the entire Applied Econometrics sequence at the Harris School of Public Policy. At the Ohio State University, I have been enrolled in courses such as the Quantitative Political Analysis sequence from the Political Science department which covered topics such as Statistical Inference, Regression, Likelihood Theory, Binomial Data, Count Data, Event History, Matching, Instrumental Variables, Regression Discontinuity, Econometrics, and Time Series Analysis. In addition, I took the Event History and Time Series Modeling courses offered by the department. During my first summer in the program, I also attended the University of Michigan's ICPSR summer program where I was trained in Applied Bayesian Modeling, Applied Multilevel Modeling and Regression III: Advanced Methods which provided me with a systematic approach to assess, fix and present results from linear models.

Statistic	Value
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12. Essay (up to 500 words): "Please describe your background (courses taken, research projects, etc.) in social and behavioral sciences."

Text Response

In addition to many statistics and mathematics courses, I have also specialized in Economics, Political Science and Public Policy. The Political Science courses at The Ohio State University can be divided into two main areas: Comparative Politics and Political Economy. The main courses for Comparative Politics have been Introduction to Comparative Politics, Contemporaneous Comparative Politics Problems (Political Violence), Intergovernmental Relations (Federalism), Politics of the Developing World and Field Research Methods. The relevant courses I have taken in Political Economy are the Political Economy of Income Inequality and a field seminar in Political Economy. My training in Economics started as an undergraduate student in Mexico. At ITAM I took the three semester sequence of Microeconomics and the three semester sequence of Macroeconomics. I also enrolled in the two semesters sequence of Advanced Microeconomics, the two semesters sequence in International Economy, Economic Development, Political Economy and others. This training was fortified by the classes I took at the University of Chicago Harris School of Public Policy. At Harris I took Advanced Microeconomics for Political Analysis and Advanced Microeconomics and passed the PhD Microeconomics Qualifier exam. While at Harris I also improved my training in Political Economy by taking the following courses: Political Economy 1: Introduction to Applied Game Theory, Political Economy 2: Intermediate Applied Game Theory, Political Economy 3: Testing Theories of Political Institutions and Political Economy of Corruption and Development (offered by the Political Science department of the University of Chicago). At The Ohio State University I continued my training in PhD-level Economics by taking Microeconomics Theory 1A, Microeconomics Theory 1B and Advanced Economic Theory (Game Theory seminar) at the Economics department.

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13. Essay (up to 500 words): "Please describe your background in programming."

Text Response

My extensive data experience, from data collection to its entry, editing, management and analysis using statistical software such as Stata and R, also make me a strong fit for the Data Science for the Public Good Program. During my time in the International Development, Evaluation and Research area at AIR, I spent a lot of time working with data in these multiple stages. In terms of data collection, I was involved in two projects where I had the opportunity to travel to Honduras and Nigeria to run a survey and collect the data. In terms of data entry, I was part of a team that was responsible for taking data received from the field and then cleaning, organizing, and entering it into a Stata file. I then also formed part of the data analysis team, where I would perform the statistical analysis that was required for the report that was later sent to the client. In the different stages of this process I was constantly writing code, first to get the dataset in a form that would be useful for analysis and second, to perform such analysis using various statistical techniques. The programming I did while at AIR was in Stata. My programming skills got stronger at Ohio State, where I have used R for statistical analysis in classes and independent research projects. For my personal research projects, I use R and Stata, depending on which one provides a better fit for the type of analysis I am conducting. I also gained experience collecting economic statistics from internet sources as an advisor to the Minister of Finance in Mexico, where I created and updated the speeches, presentations and other documents that the Minister used in his agenda. This constant updating provided me the opportunity to also perform fact-checking so that we always had the most accurate data for the Minister to use in policy-making. This real-world data experience complements the academic training in data analysis that I have gained during my Masters and PhD.

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14. Essay (up to 500 words): "Please provide information about other significant courses you have taken within your field of study."

Text Response

In addition to the courses in statistics, mathematics, economics and political science described above, there are other courses I have taken that are worth mentioning. While at the Harris School of Public Policy at the University of Chicago, one of my favorite classes was the Human Capital class in the Economics department taught by Nobel laureate Gary Becker. In addition to this class I also took classes such as Labor Economics, Crime Policy, Program Evaluation, Public Finance, Geographic Information Systems and Decisions and Organizations. At The Ohio State University I have continued to enroll in courses that could expand my knowledge in different ways from the ones required by the department. In particular, I wanted to expand my knowledge on different data gathering techniques, so I took Experimental Design and Field Research Methods. In these two classes I had the opportunity to outline a plan to develop a lab experiment and a field research plan for a three month period that could be applied to my personal research.

Statistic	Value
Total Responses	1

15. Please list the name and contact information for 2 references (teachers, mentors, or employers) that we will contact for a letter of reference/brief survey. Please make sure you list the correct email and they know we will be contacting them soon (within the next week). Only 2 references will be contacted; do not list more than 2.

Text Response

Sarah Brooks, PhD Main Advisor, The Ohio State University brooks.317@polisci.osu.edu David Seidenfeld, former boss, American Institutes for Research (AIR) dseidenfeld@air.org

Statistic	Value
Total Responses	1