

## 1. Name (first and last)

**Text Response**

Yeng Xiong

**Statistic**

|                 | Value |
|-----------------|-------|
| Total Responses | 1     |

## 2. Email

**Text Response**

yxiong@ksu.edu

**Statistic**

|                 | Value |
|-----------------|-------|
| Total Responses | 1     |

## 3. Contact Phone

**Text Response**

615-962-3411

**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 statistics |

  

| Statistic       | Value |
|-----------------|-------|
| Total Responses | 1     |

**6. List any Minors you are pursuing.**

Text Response

Statistic

Total Responses

Value

0

**7. List any honors and/or awards received:**

Text Response

Holly and Beth Fryer Scholarship in Statistics

Statistic

Total Responses

Value

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 want the opportunity to apply my years of study in mathematics, statistics, and history towards influencing public policy. Analyzing a real data set to solve an actual problem is not as clean and straightforward as some of the academic work to which I am accustomed. Therefore, I can learn how to adapt to these new challenges. In addition, I hope to improve my understanding of the partnership between a statistician and a collaborator who may not have a statistical background. As a statistician, this is an invaluable skill to have. I also want to establish professional connections through this program. Working with the mentors in the program and visiting various government agencies, I can establish a network that can help achieve my goal of a position at the Census Bureau.

Statistic

Total Responses

Value

1

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

Text Response

As an undergraduate, I conducted a review of the historical debate over one as a prime number. This entailed tracing the genealogy of prime numbers and acquiring the relevant documents. Most of the documents were not available in the school library. I then had to track them down and sometimes reached out to somebody who can access them for me. I also presented this research at two conferences. Now I am working on a methodology for estimating treatment effect in cluster randomized experiments. Specifically, I investigate and prove statistical properties for the proposed estimator to demonstrate its advantages over other estimators. I then run simulations in R and perform analysis on a political science experiment to compare them. I am also consulting on a media literacy project with a journalism professor. My main responsibility is to run analyses on the data and write up the results. However, my most important task is communicating with the professor. I need to discuss with him the problems that can affect the analysis and clearly explain the limitations of our inference.

Statistic

Total Responses

Value

1

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

## Text Response

I have a bachelor in mathematics so I studied mathematical theory in (linear and abstract) algebra and (real and complex) analysis. I took some special topic courses such as differential equations, multivariate calculus, number theory, statistical methods, and time series analysis. After completing my undergraduate studies, I enrolled in a PhD program in statistics. For my coursework, I complement theoretical classes with applied classes while also exploring the different areas of statistics. My theoretical classes include mathematical statistics, linear model theory, spatial statistics, Bayesian statistics, and causal inference. In the applied studies, I attended courses in linear regression, categorical data analysis, survival analysis, experimental design, and sample survey methods.

## Statistic

Total Responses

## Value

1

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

## Text Response

My second undergraduate degree was in history. I took American and European history courses. We discuss how economics, politics, and culture influenced a country's people and policies. In addition, we look at how they also affect a particular group of individuals such as women. Aside from Western history, I had a Mongol and Turks history class. We read through primary sources such as The Travels of Marco Polo to examine the Mongolian empire while maintaining awareness of any bias that can shape these accounts. Furthermore, I minored in Japanese. Learning a people's language can provide insights into their culture. I personally got to experience that culture through a travel study to Japan. By living with a Japanese family during my visit, I participated in the more modest aspects of Japanese life. I gained a citizen's perspective on the state of the country and the issues it faces. Aside from the classes for my major and minor, I supplemented classes in psychology, geography, and leadership. In addition, while my current research is heavily oriented towards statistical theory, it has applications in the social sciences.

## Statistic

Total Responses

## Value

1

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

## Text Response

I primarily use R for my coursework and research, but I can also use SAS. I also had a basic introduction into C++. However, I would like to learn other programming languages such as python.

## Statistic

Total Responses

## Value

1

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

## Text Response

I shadowed a few students who worked in the department's consulting lab. We discuss all the facets of collaboration and discern the difference between consulting and collaboration. Sitting in some client meetings, I learned how to gather information from the client to establish the experimental design without using statistical jargon. I also practiced how to report on the client meetings in a detailed but concise manner.

## Statistic

Total Responses

## Value

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

Dr. Michael Higgins (mikehiggins@ksu.edu) and Dr. Abigail Jager (jager@ksu.edu)

## Statistic

Total Responses

## Value

1