

1. Name (first and last)**Text Response**

Harsimrat Pandher

Statistic

Total Responses

Value

1

2. VT Email**Text Response**

harsim4@vt.edu

Statistic

Total Responses

Value

1

3. Contact Phone**Text Response**

7039457631

Statistic

Total Responses

Value

1

4. Essay (up to 500 words): "What do you want to get out of this experience?"**Text Response**

As part of this Data Science for the Public Good program, I want to improve my knowledge of real-world problems and skills that will apply to my future career goals. This opportunity will allow me to work with several types of scientific and statistical tools such as Python, R, GIS and much more. Although I have heard of these tools and have a little background in some of them, I want to be able to apply them to real-world situations; by doing this, I hope to gain a better understanding of these tools. Other than learning about these tools, I look forward to working with people who have diverse backgrounds. Even though we will all have different backgrounds, we will still be working towards a common goal. For instance, my freshmen year at Virginia Tech, I had to create a business plan with a group. My teammates had backgrounds in accounting, marketing, information technology, and economics which helped us gain different perspectives on creating the business plan. I enjoy working with others because there is always something to learn from people, whether it be about statistical tools or other disciplines. Just as researchers with diverse knowledge will play a crucial role in collaborating in DSPG, I want to contribute to this research with the skill sets I possess. Another thing I want to take advantage of is being able to work with mentors. Mentors will be able to provide me with constructive feedback which will not only improve my technical skills, but also help me grow as an individual. Applying the feedback to the interdisciplinary projects will give me a new sense of confidence in the direction of my career. This program will also be my first hands-on exposure to my future career in information technology; therefore, the skill sets I learn will be very valuable to me. In a broader sense, I would like to make an impact on the community with the research I do with the DSPG program. The amazing part about DSPG is that the research will be cross-disciplinary, so by collaborating with researchers from different fields, we can make knowledgeable decisions. The various facts and data we gather will allow us to question and answer the problems that are being posed in society. With this research project, I will focus on providing solutions to these problems in a sustainable manner.

Statistic

Total Responses

Value

1

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

Text Response

The first extensive research project I did was a Science Research Project in high school. For my research, I decided to test how different concentrations of organic blueberry juice affects the survival rate of E. coli K12. From my research, I learned that blueberries had many antibacterial properties and the goal of my research was to test these antibacterial properties. My biology teacher was my mentor for this project and with her direction, I was able to test the effect of organic blueberry juice on E. coli K12. This research project was completed within one year and at the end of the year, I presented it to different scientists and received input. I really enjoyed this science research project because it pushed me to really understand my topic. It also gave me experience as to what components are part of a research project and how they are all pieced together. Another research project I did during my senior year of high school was related to my statistics class. The research was about looking at the life expectancy in the country Yemen. I gathered data about Yemen's past rate of life expectancy and from there, I was able to find many statistical measurements such as finding the correlation coefficient, plotting the least squares regression line, and discovering the residuals. This project really helped me apply statistics in a real-world situation and sharpen my skills. Other than these research projects, I have not had the opportunity to do research as part of my classes at Virginia Tech. This is another reason I would like to be part of the DSPG program. The work experience I have is with Virginia Tech Dining Services. I worked in Turner's Place at Lavery Hall and was in the kitchen making desserts for the most part. Although this job is not related to my future career, it did teach me that communication is very important because it can eliminate any misunderstandings between people. I also had to be very detail-oriented with handling the food, making sure it was at the right temperature, and keeping everything sanitized. These experiences have given me technical and interpersonal skills that I can bring to DSPG and when working with other participants and experts.

Statistic

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

6. In Fall 2017 you will consider yourself to be a:

| # | Answer | Bar | Response | % |
|---|---------------------------------|---|----------|------|
| 1 | Freshmen Undergraduate Student | | 0 | 0% |
| 2 | Sophomore Undergraduate Student | | 0 | 0% |
| 3 | Junior Undergraduate Student |  | 1 | 100% |
| 4 | Senior Undergraduate Student | | 0 | 0% |
| | Total | | 1 | |

Statistic

| Min Value | Value |
|-----------|-------|
| | 3 |

| Max Value | Value |
|-----------|-------|
| | 3 |

| Mean | Value |
|------|-------|
| | 3.00 |

| Variance | Value |
|----------|-------|
| | 0.00 |

| Standard Deviation | Value |
|--------------------|-------|
| | 0.00 |

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

7. What degree(s) and major(s) are you pursuing?

Text Response

Business Information Technology

Statistic

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

8. List any Minors you are pursuing.

Text Response

Statistic

| Total Responses | Value |
|-----------------|-------|
| | 0 |

9. List any honors and/or awards received:

Text Response

Dean's List Fall 2015 & Fall 2016

Statistic

Total Responses

Value

1

10. Please indicate which position you are interested in:

| # | Answer | Bar | Response | % |
|---|--|---|----------|------|
| 1 | For pay | | 0 | 0% |
| 2 | For VT credit (you are responsible for contacting your department to obtain advisor approval for research credit. This form should be submitted to BI once you have been matched.) |  | 1 | 100% |
| 3 | either for pay or VT credit | | 0 | 0% |
| | Total | | 1 | |

Statistic

Min Value

Value

2

Max Value

2

Mean

2.00

Variance

0.00

Standard Deviation

0.00

Total Responses

1

11. Please rank in order of preference which labs you are interested in: