Statistics Combined Program Statement of Purpose

Jaxson Bugg

The Statistics department at Miami University has already put me in a great position to succeed through both the content presented and those presenting it. I have received an unparalleled educational experience and am fortunate to have bonded with professors and other staff throughout my time. This is perhaps the most significant reason for choosing the Statistics graduate program at Miami University: I can guarantee that any time and effort I invest in this program will be a worthwhile investment in my future.

The curriculum thus far has introduced me to RStudio coding in the form of both data analysis and visualization, and I only hope to expand on these skills in my future coursework at the graduate level. A class like STA 504 appears to expand on concepts learned in STA 308 and STA 309, which were both classes that I greatly enjoyed and excelled in. If admitted into the graduate program, I intend to hone other programming languages such as Python and Java using what I learn in the coursework to build my repertoire. I also took a great interest in applied statistics concepts learned in STA 363 such as model building and selection. Specifically, linear regression is of particular interest to me. This is why I was pleased to learn that STA 563 and STA 566 expand on concepts of linear regression and experimental design procedures, respectively, most likely with professors I have not yet had.

I have had the privilege of learning from dedicated faculty members in the statistics department and forming meaningful connections with them inside and outside the classroom. These experiences have been extremely beneficial, but I am excited by the prospect of continuing my studies at the graduate level, where I envision the opportunity to engage with professors' specialized research interests within an incredible academic environment. I look forward to learning advanced statistical methods and applications from the best that the

university has to offer. Though I have enjoyed various topics within the discipline, I hope to also reach the point where I can narrow down my particular interests while also taking advantage of a well rounded curriculum. This will both refine my job search and communicate a well-rounded background to employers with a master's degree as significant credibility.

Presently, I anticipate my career to combine statistics with a Christian ministry setting. I hope to supply leaders both locally and nationally with unbiased data regarding trends in both Christianity and other traditions. I also hope to use my knowledge from Statistics courses at Miami to help ministers make decisions based on collected data that could improve the overall state of the church and faith. The graduate program could help to refine skills that could be used for understanding congregation demographics, optimizing community outreach, and other ministry-related improvements that can be accomplished through statistics. This could be done by presenting clean data visuals based on collected data and created models that help to illustrate both a problem and a solution within the faith community.

Our world is becoming increasingly analytical and in order for religious institutions to prosper, they too must follow this path. However, people with strong influence (such as a church leader) often only make decisions based on the advice of people with strong credibility. Potentially making the wrong decision could have dire consequences. I aim to be the person in a position of influence to a church body so that I may know the impact that my work has on the community.

Overall, my excitement to potentially continue my education at Miami cannot be overstated, as my experience thus far has exceeded all expectations. I know that if I am accepted into the program, I will take full advantage of the opportunities granted to me and have a noticeable impact on the community that I will be a part of after I graduate. If admitted, I intend

to build upon existing relationships with professors and create new ones that will maximize my development as a student. I hope that those who have been in consistent contact with me here can attest to my character, work ethic, and passion for statistics, and that I will be considered a strong candidate for graduate school admission at Miami University. I greatly appreciate the time of those involved in the application process and look forward to the final decision.

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