

# Statement of Purpose

USF Master of Science in Data Science

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"Data Science empowers me to share knowledge in ways I never thought possible."

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## Interest in Data Science

My motivation to experiment with data grew out of the desire to make a greater positive impact on the world. I am driven to discover insights that are otherwise overlooked, and to provide information through data storytelling. I am also interested in investigating historical biases that are built into data science related algorithms and statistical models.

## Program Qualifications

This Spring I will attain a Bachelor of Science degree, *summa cum laude*, in Statistics, with a concentration in Data Science. Through learning objectives that emphasized programming, applications, and relevant theory, I leave with a comprehensive understanding of the statistical concepts, and computational tools necessary to effectively examine data. To supplement my university coursework, I have earned a Data Science Professional Certificate from IBM, and have taken online courses in R, Python, and SQL programming.

While I have enjoyed, and succeeded, in Data Science coursework, the highlight of my undergraduate experience has been serving as President of the CSU East Bay Data Science Club. In this leadership role, as well as my previous role as Vice President, I was tasked with creating and implementing a vision for the organization. I responded by developing and hosting weekly meetings, with the mission to demystify data science. I also established and moderated an online support network inclusive to all students interested in data driven fields, which has gained over 150 members. Statistics faculty members expressed appreciation for these initiatives by awarding my accomplishments with a department scholarship.

These roles have helped me to gain practical experience and a wide range of technical skills. However, I also had the opportunity to exercise critical soft skills. These strengths have proved transferable to my part-time job as an Assistant Student Instructor. As a Student Instructor, I provide support to students enrolled in Introductory Statistics courses during weekly designated office hours, and in the classroom. I regularly help students with exam preparation, homework, and software. My experiences as a Student Instructor have reinforced my own understanding of statistics, and challenged me to use critical thinking by explaining concepts in multiple ways.

## Educational Experience

Before making any strides at CSU East Bay, I actually lacked knowledge in any quantitative study. I began my education by taking remedial courses in mathematics. During community college, I sought to further my knowledge of this subject. Upon transferring, I had completed 12 math courses and fulfilled my general education degree requirements.

During this period, I worked full-time as a professional bartender. In order to afford the total cost of enrollment in a degree program, I was willing to stop attending courses if opportunities for additional work became available. Opting to retake general education courses during a shorter term meant I could later devote myself to major-related coursework. With enough savings to cover two years of tuition and living expenses, I left an industry where I had expertise to attain a Bachelor's of Science in Statistics.

As reference, my college transcripts are summarized in the following table:

College	GPA	Count	Classes Withdrawn
LAMC	3.91	5	
CCSF	3.77	0	
CSUEB	3.87	1	

While evidence of discontinued courses are reflected on my LAMC transcript, I hope that it is not seen as a reflection of my current academic character. A strong GPA and commitment to upper division major coursework are truer representations of myself as a student.

## Academic and Career Goals

After receiving my undergraduate degree and earning a professional certificate, focusing on practicum will be the next step in my educational journey. This is a driving reason I have for participating in the 2022 USF Master's in Data Science program. If accepted, I plan to devote the academic year gaining skills to apply toward a new career in the Bay Area's tech industry. Despite my career focus, I want to emphasize that I see myself as a lifelong learner. Just as my bartending profession funded my undergraduate expenses, I wish to make a career in data science related positions to pursue further academic endeavors.

My long term academic and career goal involves enrolling in a doctoral program after holding a senior data science related position. When I explored different branches of data science as an undergraduate student, I found myself drawn to textual data. The lack of structure in textual data has inspired me to begin working on projects that emphasize text-mining and natural language processing. I have considered entering a doctoral program to research advanced methods for the detection of misinformation.

## Ultimate Goals

Data science offers the power to gather information that can be used to expose injustice. I pursued it to accomplish things I never thought I had the ability to do. As I continue to grow in this field, I want to use my knowledge to bring awareness to neglected issues, and to approach problems for purposes other than generating profit. I believe that the USF Master's in Data Science program will help me attain these goals. I look forward to the prospect of starting the program this summer. Thank you for your time and consideration.