

My experience with a one quarter research project in the  
[Program in Quantitative Social Science](#) at [Dartmouth College](#)

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Class of 2020

The [Quantitative Social Science one quarter project](#) provided me with an opportunity to develop my research skills, apply the tools I'd learned from my core major classes, and do so with the flexibility of picking a field of study that I am truly excited about. My project examined professional surfing through a statistical lens to determine whether surfing on the frontside has a competitive advantage over surfing on the backside. In other words, I wanted to see if certain combinations of wave characteristics and surfer characteristics led to better results over the course of a season.

A huge part of my project was web scraping with the coding language R. I used skills from my core major classes, such as [QSS 41 Analysis of Social Networks](#), as well as new techniques I learned during the course of my project to write code that would scrape extensive data from the internet. I collected and organized surfer characteristics, wave characteristics, and competition results going back over a decade from the [World Surf League website](#). This was the most difficult but also the most rewarding part of my project, and I received invaluable guidance from both [QSS professors](#) and [James Adams](#), the QSS librarian.

Once I had collected and organized my data, the next step was running tests and presenting my results aesthetically on a poster board for the final presentation. Ultimately, I found that surfers on their frontside perform better than surfers on their backside over the course of the season. During the expo-style final presentation, students and professors walked by my poster board and asked questions about my project. I had to work on distilling my overview to a quick elevator pitch for each person that walked by. Given how much time I had spent on the project and how well I knew the research, I found that I could confidently answer the questions I received.

My QSS one quarter research project was my first independent experience in research, and I came away with a much better understanding of how research works and a newfound confidence in my own academic abilities. The project was a big undertaking, and I learned a lot of technical skills along the way. The combination of principles learned during my core major classes, support from QSS professors and librarians, and my own excitement about the research topic made the project one of the most engaging, educational, and rewarding projects I've ever worked on. I encourage all future QSS students to really focus on picking a topic they are passionate about. If I could find data for a surfing project, then I believe the sky is the limit for any field that may interest students in the future.