Reputation-Building on Online Platforms
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This summer I worked as a research assistant for the Reputation-Building on Online Platforms project under the mentorship of Prof. Aislinn Bohren of the Economics Department. The project focuses on studying the value of a good reputation. The rise of online platforms, such as EBay, Yelp, and Quora, has changed the way information is aggregated. Online marketplaces and forums have been using reputation system as a technology for building trust and fostering communication. Studying reputation formation on an online platform would raise questions on consumer psychology and reflect underlying social norms.

The main goal of the project is to measure whether consumers with higher reputations receive more favorable feedback. We ran a randomized control trial to study the dynamics of reputation on an online platform called the Mathematics Stack Exchange. Other research questions have also been raised, such as whether consumers (answerers) would respond differently to sellers (askers) of different genders, and if the pattern is associated with the current unequal representation of gender in the STEM field.

During the project, I conducted research, wrote summaries on scholarly articles, and gained a deeper understanding of related fields. My duties included answering mathematical and statistical questions posted by other users on Mathematics Stack Exchange in order to build up reputation for our accounts created for the experiment. I participated in generating questions for the control trials, with one group of accounts having high reputation and the other group having none. The goal of the trials is to see if the difference in the reputation score could cause a difference in the quantity and quality of the feedbacks received. Then, I assisted with collecting the online responses and analyzing the results using t-tests to see if the difference was significant enough.

The PURM experience served as an ideal gateway into the research world, allowing me to explore a social science and a potential career path. During the course of the research, I learned how to design and conduct a field experiment, analyze data, and write a research paper. One of the most important skills I obtained was using LaTeX, a document preparation system for high-quality typesetting. The data collection stage enhanced my knowledge on Excel and strengthened my
organization skills. As a potential math major, I am glad that this experience helped me improve and reinforce my understanding of mathematical and statistical fundamentals, and that I was able to apply the concepts and knowledge I have learned from classes to real-world problem solving. I will be continuing my work with Prof. Bohren on this project during the upcoming fall semester and am excited to further sharpen my research skills.