Project # 2: Mini Proposal

- 1. Project Title: Labor & Robotics: The Economic Implications of Automating Work
- 2. Project Objective: I intend to study the effects that automation has on workers and the economy. I want to find out the amount of jobs being created as a result of automation. I also want to find out the amount of jobs that are being lost as a result of automation. I would also like to know if automation resulted in increased or decreased wages for workers.
- 3. Project Background and Significance: Technology is constantly advancing forward. It is important to understand the consequences of implementing new technology in order to utilize these technologies responsibly. If automation is implemented without oversight, there could be a significant decrease in available jobs and wages for workers. Through the study of real world implementations of automated labor, we are able to better understand some of the impact that automation has on the economy. This information could be of importance to companies, employees, governments, and policymakers.
 Companies could utilize this information to predict and prepare for implementing automation into their workflow. Employees could use this information to understand how automation has affected other workers. Governments and policymakers could utilize this information to design policies regarding the use of automation. Utilizing this research, along with careful planning, allows us to better prepare ourselves for the future and mitigate any potential negative consequences that automating work could bring.

- 4. Research Methods: I intend to field a survey that targets employees that have worked at a company that utilized automation. I would first research what companies and industries utilize automation the most. I would then draft up a sample survey and ask my peers to review it. This would help eliminate any confusing questions or unclear statements. Once I have finalized the design and content of my survey, I would begin researching the delivery method of the survey. In order to reach the most people, the survey would most likely be delivered online. This survey could then be posted in public-facing spaces such as Linkedin or Facebook. I would attempt to advertise the survey to people in the correct demographic. This survey could also be distributed through email and mailing lists. I would then compile all of the data that was received from the survey. I would utilize this data to help compliment the secondary research I conducted through academic journals and periodicals.
- 5. Expected Outcome: After completing my research, I expect to create a white paper to share my research with others. Through the use of a white paper, I would be able to sufficiently share and explain the data I compiled from my survey. I would also have plenty of space to include secondary research I have conducted. In this white paper, I would introduce the topic of work automation. I would then explain some of the consequences that automation could have on the economy. These explanations would be backed up through survey data and cited secondary sources. Finally, I would provide some potential solutions that could be used to mitigate some of the problems that automation brings. Before publishing this white paper, I would consult with my peers to help proofread and ensure it is clear of any glaring mistakes. I would also conduct a poster presentation at an undergraduate research conference. Through the use of a poster,

I could visually display data from my survey. I would also be able to physically display graphs and figures from my secondary research. One benefit of a poster session is that I would be able to explain and answer any potential questions that arise about my research. Before conducting my poster presentation, I would make sure to rehearse and practice my presentation orally beforehand. I would draft a speech and practice in front of a group of my peers. This would help me ensure that my presentation is clear and easy to comprehend. I would also practice answering potential questions that may arise. I could also create a website to help introduce my research to others. This website could host both my white paper and a picture or video of my poster presentation. An advantage of this is that anyone would be able to easily view and access my research.

6. Literature Review.

Works Cited

Acemoglu, Daron, and Pascual Restrepo. "How Technology Displaces and Reinstates Labor." *The Journal of Economic Perspectives*, vol. 33, no. 2, 2019, pp. 3–30, https://www.jstor.org/stable/26621237.

Acemoglu, Daron, and Pascual Restrepo. "Implications of Technology for Growth, Factor Shares, and Employment." *The American Economic Review*, vol. 108, no. 6, 2018, pp. 1488–1542, https://www.jstor.org/stable/26528016.

Borjas, George J., and Richard B. Freeman. "From Immigrants to Robots: The Changing Locus of Substitutes for Workers." *RSF: The Russell Sage Foundation Journal of the Social Sciences*, vol. 5, no. 5, 2019, pp. 22–42, https://doi.org/10.7758/rsf.2019.5.5.02.

- Cheng, Hong, et al. "The Rise of Robots in China." *The Journal of Economic Perspectives*, vol. 33, no. 2, 2019, pp. 71–88, https://www.jstor.org/stable/26621240.
- Tyson, Laura D., and John Zysman. "Automation, AI & Work." *Daedalus*, vol. 151, no. 2, 2022, pp. 256–271, https://www.jstor.org/stable/48662040.
- 7. **Preliminary Work and Experience:** As a computer science major, I have some experience with creating programs that automate tasks. I understand the potential that automation could bring to the workforce. I have also completed prior English composition courses and completed prior research papers. I believe this makes me fully qualified to conduct this research sufficiently.
- 8. **IRB/IACUC statement:** This research involves the use of a survey, so it would require IRB approval.