Analysis of technology varies when utilizing different lenses. For example, I chose to analyze 3D printing through an historical lens due to the context that it provides. If I were to have analyzed the technology through natural and applied sciences, my language in which I communicate would change drastically. It is likely that I would be discussing the scientific method and how the technology relates to scientific advancements.

Critically analyzing 3D printing in my event is not only recommended, but it is necessary to understand the event itself. The integration of 3D printing into the healthcare field relies on the simple fact that 3D printing can offer things that other methods cannot. Because of my historical analysis, I know that 3D printing was essentially built on the foundation of healthcare. If I were to enter a debate on weather 3D printing should be more commonly practiced in hospitals, I would need evidence to support my arguments. I could bring up the fact that dentists have been utilizing 3D printers for decades to produce high resolution mold for artificial teeth.

Critical analysis is also an important tool to eliminate bias throughout academic research. By setting aside everything you know about something and analyzing all of the hard facts, bias will often be shed from the conversation. As I have discussed previously, there is a poor stigma on the strength and resilience of 3D printed parts. If everyone were to critically analyze the technology, they would realize that 3D printed parts can be quite strong. Mark Forged supplies carbon fiber filament which they say even gets to metal like strength. “Continuous fiber 3D printing adds continuous strands of fiber reinforcement to the part (think back to fiber strands), to achieve metal-strength properties at a fraction of the weight.” (Forged 2024)

Coming from a background in technology and nearly finishing a computer science degree, I have a larger knowledge base of technology than your average person. It is quite often that I encounter people talking about tasks they wish they could automate, only for me to make them aware of the latest tech that could help them out. I have utilized many tools in the form of software at work to automate some of the most monotonous tasks.

Forged, M. (n.d.). *3D printing carbon fiber and other composites*. Markforged. https://markforged.com/resources/learn/design-for-additive-manufacturing-plastics-composites/understanding-3d-printing-strength/3d-printing-carbon-fiber-and-other-composites