

Virginia General District and Circuit Court Data Scraping Project
(Technical Report)

**Negligence of Web Accessibility for Disabled People and the Potential for Larger User
Spaces and a More Inclusive Virtual Society**
(STS Research Paper)

An Undergraduate Thesis Portfolio

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Socio-Technical Synthesis: Court Data Scraper and Web Accessibility for Disabled Users

While my technical project and STS research may seem unrelated at first glance, they both deal with the issue of accessibility for users. Both projects deal with the issue of improving accessibility for software in some way such that more users will be able to interact with such software. The difference is that my technical project involves improving accessibility to resolve a specific issue, whereas my STS research analyzes a specific case of software that failed to be accessible in order to improve understanding of the overarching problems involving web accessibility. While one project focuses more on the theoretical, while the other focuses on the practical, both projects attempt to improve the issue of software accessibility through some means.

The aim of my technical project is to create a data scraper for Virginia district and circuit courts, and to make that data available and downloadable in a graphically simple website. Data scraping means extracting data from something (in this case the General District Court Online Information System) into a human-readable output. What we have done is written a program to scrape court case data from this website into multiple json files. We then inserted all of this data into a database and created a simple website in which users could easily download our scraped data into csv files. The goal of this project is to improve accessibility of Virginia court case data in order to allow more opportunities for research into such data. An example of research that could be done with such data would be exposing certain biases and trends that may be evident across multiple cases.

My STS research involved tackling the issue of web accessibility for disabled users. Most websites are not designed with disabled users in mind, as they do not make up enough of developer's user bases to be considered a priority. The result is that many websites are

inaccessible to people with disabilities. In my paper, I used the STS framework of actor-network theory to analyze a case in which Target Corporation's website failed to accommodate blind users. I argued that the blame for such negligence of web accessibility should not solely be directed at the government, which has failed to enforce its regulations involving web accessibility, but rather, web designers should also be held accountable. I also showed the benefits of integrating web accessibility in to the UX design process (a common website design process), and how web designers should view web accessibility as a good thing.

I began my technical project before my STS research, and yet both projects helped to inform the other. My technical project helped to make me aware of the general issue of waning accessibility for certain software. This helped inspire the topic for my STS research. Subsequently, my STS work helped improve my mindset when working on the website for my technical work. I was extra cautious of the implications that certain design choices would have on specific groups of users, and I tried to keep accessibility in mind throughout each stage of the design process. Though my technical work inspired my STS research, my STS research in turn helped to improve the quality of my technical work.