

Thesis Portfolio

A Better Auth Experience
(Technical Report)

The Rise and Power of Social Media Censorship
(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

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Department of Computer Science

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Introduction

I want to start off by disclaiming that my technical topic has no direct relationship to my STS topic. My technical project examines my summer internship at Amazon. I give a detailed analysis on my thinking process and my contributions during my time there. I worked by myself and with my mentor to create a dashboard that helped AWS IAM to aggregate and disseminate IAM findings to assist in the auditing and monitoring progress. My STS paper on the other hand dives deep into the evils of social media that many people today are not talking about.

Technical Topic

Millions of people use AWS services and billions of APIs for services are used daily. As each API for a service is called, the user must be verified first and be assigned sufficient permissions to call the API. Most users can adjust permissions once and move on with their life worrying about bigger problems. This is made possible because of the AWS IAM team. Making authentication and authorization seamless to the user. Its one of the things that you don't notice unless something is wrong. Then it becomes very noticeable and frustrating.

My role as a part of the AWS IAM Auth team was to create a dashboard to display and identify these calls that were not working properly. Our team tested every possible call every day to identify which services were not working as

expected. Creating this dashboard expedited the process of finding failures and helped management identify the progress that my team was making towards our goal of 100% consistent auth experience for the user.

STS Topic

All good things must come to an end. As technology has advanced and made leaps and jumps in the past decade it has left behind many regulations and ethical practices. In particular, social media as a technology has been on a rising surge of user activity and influence. This influence has gone unchecked and can cause many problems in the future, if nothing is done.

My research looks into previous incidents of social media gone un-checked and the consequences that a country and population could face. There are many hidden agendas that social media giants hold that are private, my research tries to identify these. Along with this, I also identify a couple solutions to this social media pandemic.

Conclusion

Although my technical topic and STS research topic are vastly different, they both involve the newest and most innovated technology. As technology evolves so does the world. It is important that we as a society are able to keep up with this fast pace environment.