

**Thesis Project Portfolio**

**FromFrom: The Plan to Connect the Middle East**

(Technical Report)

**The Effects of Social Media on the Mental Health of Adolescents (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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## **Sociotechnical Synthesis**

(Executive Summary)

### *Using, Learning, and Building Social Media*

I had a high curiosity for social media and the way it worked with the mind following the quarantine period of the coronavirus epidemic. There were new social media platforms on the rise, and they attracted many users. But along with this, came discussion about the usage of social media and how it can affect the user's mind - if it was positive or negative, and many pros and cons for each. This led to STS research topic, which was about the effects of social media on the mental health of adolescents around the world. Partially related to my technical topic was my technical research, which was a recollection of a summer internship experience I had building a social media application named "FromFrom".

In my STS research, I developed a research paper on the effects of social media on the mental health of adolescents around the world. I explored positive and negative effects through different sources of evidence, such as case studies, public media articles, and other research papers. Among the positive effects, some had been companionship, such as making new friends and becoming part of groups online. On the contrary, there are negative effects as well. Adolescents can develop addiction to social media and end up wasting a lot of their time, as well as potentially get bullied on social media. It can also cause them to compare themselves to unrealistic standards online, such as edited photos, and cause problems such as body dysmorphia. There are positive and negative effects, and users should be aware of both.

The technical portion of my thesis is an account of my summer internship experience developing a social media application called “FromFrom”. The goal of this application was to help users connect based on their background, and it was targeted for the middle east. I detailed the process of developing the application, from design to actual bugs and features I worked on, such as the messaging system, and how the courses at the University of Virginia prepared me for such an internship experience.

Though my projects were partially related, the STS research definitely enriched the technical portion - it provided a lens for developing the application. I was more aware of dangers such as bullying and harassment, as well as possible issues of unrealistic comparison. However, it also gave me a sense of satisfaction knowing users could potentially make many new friends using the platform. They were both very rewarding projects to undertake, and I sincerely hope the community of the future will be able to benefit from both.