

Thesis Portfolio

Cognitive Assistant Protocol Selection For Emergency Response Situations
(Technical Report)

Comparison of The Motivations Behind Facebook Users And TikTok Users
(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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Spring, 2021

Department of Computer Science

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Sociotechnical Synthesis

Emergency response situations require quick thinking and critical decision making. One wrong decision or a second of hesitation from an emergency responder can result in major consequences. My technical research dives deep into a modular component of a cognitive assistant for emergency response which intends to improve situational awareness and safety of first responders by real-time collection and analysis of data from the incident scene and provide dynamic-driven feedback to them. My research specifically focuses on how to improve the performance of the protocol selection modular component.

Knowing the user motivation and psychology behind different social media platforms can play a huge role on how future social media algorithms will develop in the future. My STS research focuses specifically on comparing Facebook and TikTok in terms of each respective platform's users, purposes of spending on time, the friendships defined, the algorithm and user interfaces, and how the respective algorithm designs attract different users.

The technical subject of the STS prospectus and the technical topic for the Dept. of Computer Science is not related.