

Thesis Portfolio

A Literature Review on the Technical Aspects of Facial Recognition Technology and Its Societal Impact
(Technical Report)

A Comparative Study on the Sociopolitical Aspects of Facial Recognition in Different Societies
(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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Thesis Prospect

Sociotechnical Synthesis

The technical project selected involves a review of literature on the topic of facial recognition technology. This involves a thorough analysis of the literature in the topic and a summary that focuses on the contributions of the papers reviewed. This technical project seeks to study a different facet of facial recognition compared to the STS research, namely, its capabilities and development.

The STS research seeks to investigate the sociopolitical and cultural aspect of facial recognition. Facial recognition technology's capabilities have expanded greatly in recent years, bringing with it many different forms of application, whether it be for education, health, commercial uses, or security. Development and integration of facial recognition into different aspects of daily life gives the technology and system increasing agency and influence. However, the growth of facial recognition is not without conflict and controversy, depending on the society and culture in which the technology is developed. This study seeks to compare the social, political, or cultural basis for the differences regarding the application of the technology in the U.S., the EU, and China.

While the STS research and technical project are focused primarily on different aspects of facial recognition technology, throughout the course of the research, there will certainly be areas of overlap, as the technological development of the technology is closely tied to the various socio-political and cultural aspects, as well as ethics of development and propagation of this technology.