## **Thesis Portfolio**

A Proposal for an Origin of Information Lookup Tool (Technical Report)

Digital Humanity's War Against Misinformation (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**

This thesis as a whole addresses misinformation in the modern digital era.

Misinformation can be viewed as a lifecycle, following the three stages of "production," "stabilization," and "propagation." As will be examined, misinformation is poorly represented when viewed as simply falsehoods spoken from one person to another. In the Information Era, misinformation originates from a wide variety of sources, can stabilize in unexpected manners, and can potentially propagate to millions of viewers in the blink of an eye.

The technical thesis is directly related to this global problem: a proposed online misinformation tool, capable of tracing a source in a given social media post, news article, or other digital statement. As will be investigated in this thesis, it is nearly impossible to assert that a given statement is strictly true or false; there are many political, social, and other related perspectives that influence whether a statement may be true or false to certain parties. With this understanding, this proposed tool would attempt to trace the source of information so the software's user would be able to make a more informed decision on whether to trust the information or not.