Programming Public Safety: A Script to Help Save Lives
(Technical Report)

Polarizing Police: America's Relationship with Law Enforcement
(Sociotechnical Research Paper)

An Undergraduate Thesis Portfolio
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How may law enforcement most effectively pursue its mission? Law enforcement is a critical part of citizen safety in any nation. Law enforcement today needs both the physical and social tools necessary to serve those in their jurisdiction.

What lesson of lasting professional value did I learn from my internship experience at L3Harris? During my time at L3Harris, I was involved as a team member working on the back end of the radio network system where I created a configuration tool for assistance in programming newly constructed radio network systems for law enforcement, firefighters, and EMS. Working along with one team member, we created a Python script that read in configuration files and programmatically configured the towers in accordance with the specification sheet provided to the engineer who was setting up the tower. During this time, I also developed many professional skills in enabling me to learn to document software, give demos in front of dozens of people, and work in a team on a strict time schedule for a release.

The United States has had a long evolving relationship with law enforcement in the past 12 years. In the US, how have both the critics and allies of law enforcement polarized public perceptions of it since 2012? The Black Lives Matter movement stemmed from the death of Trayvon Brown in 2012 and proliferated after the death of George Floyd in 2020. Movement participants criticized US policing, characterizing it as excessively violent, discriminatory, and racist. Opponents of the movement organized in response, many of forming a countermovement called Blue Lives Matter. Online media can be divisive in its effects. Social media promotes echo chambers and favors simple headlines over complex context, often to the point of misinformation. Mainstream broadcast media has also grown more specialized in its market segmentation, and

therefore also tends to polarize audiences. Thus, both social and mainstream media tend to divide audiences against each other, leaving a forgotten middle ground between them. For law enforcement, the effects can include community distrust and greater risks in the line of duty.