Testimony of

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"The Role of Technology in Countering Trafficking in Persons"

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Introduction

Chairman Foster, Chairwoman Stevens, Ranking Members Norman and Baird, and members of the subcommittees, thank you for the opportunity to appear before you today to discuss the role of Artificial Intelligence in fighting human trafficking. My name is Emily Kennedy, and I am President and Co-Founder of Marinus Analytics.

Sex trafficking is rape for profit, and one of the most egregious crimes of our time. I first encountered human trafficking when traveling through Eastern Europe as a teenager, and I knew that I had to spend my life doing something about it. What started as my student project in Carnegie Mellon University Robotics resulted in a tool that has helped identify an estimated 6,800 victims of sex trafficking, just in the last 2 years.

Marinus Analytics & Traffic Jam

My company, Marinus Analytics, develops AI for social impact. Our flagship software, Traffic Jam, is an AI-based investigative tool used by law enforcement across the United States, Canada, and the United Kingdom to identify sex trafficking victims and dismantle organized criminal networks. It is also used by non-profits like the National Center for Missing & Exploited Children**,** which uses Traffic Jam to process the approximately 10,000 child sex trafficking reports they receive every year.

Traffic Jam looks at data across publicly-available online classifieds ads—like the once notorious Backpage.com—where victims are advertised. We see millions of datapoints weekly here in the United States. This activity is far too extensive for investigators to process manually, and makes it easier for traffickers to stay hidden in the data.

Our Approach to Machine Learning & Data Analytics

Traffic Jam leverages AI to find patterns that aid in victim recovery and help reveal massive organized criminal networks. For example, the tool can identify trafficking rings operating across cities and states, and help prioritize leads for critical resource planning.

Traffic Jam helps narrow the scope of relevant information to an amount that is manually digestible. It brings to light the most potentially actionable leads for an investigation, and often cuts down investigative time from months to days, for a fraction of the cost of a full-time equivalent.

In addition to helping find missing kids, we also identify organized crime groups exploiting dozens or even hundreds of victims. As a result of one of the leads we generated, an organized crime ring was indicted in early 2019 for trafficking Chinese foreign nationals for sex in 12 U.S. cities and Toronto. The sting operation successfully took down nearly 500 website domains and computer systems that logged more than 30,000 customer phone numbers.[1]

[1] https://www.justice.gov/usao-or/pr/nationwide-sting-operation-targets-illegal-asian-brothels-six-indicted-racketeering

Data & Technology Gaps, Opportunities & Challenges

The COVID-19 pandemic has increased the economic risk for already vulnerable persons to fall into human trafficking. We saw at most about a 20% drop in activity over the first half of this year, and activity has since grown back to near normal levels. This could suggest new entrants into the space, despite increased physical risks; it could also suggest an increased reliance on digital forms of commercial sex. Traffic Jam provides reports that highlight recent potentially vulnerable entrants into commercial sex during the lockdown; by pairing this with victim-centered training, we help promote safeguarding during the pandemic.

There are frequent upheavals in the online space. When Backpage.com was shut down, illicit activity rapidly shifted to a variety of smaller websites. But, within six months, we saw the total activity on these websites *surpass* the volume on Backpage in the month before the shutdown. Many investigators had cases whose online presence went cold when they couldn't easily go to Backpage to find activity, but we were able to quickly help them navigate this new environment.

Recently, we have seen new challenges in a flood of phishing and cyber fraud online. Money made from these schemes, in addition to money laundering of sex trafficking proceeds, often funds organized crime. More research and development are needed here to identify and combat the funding channels sustaining organized crime groups.

The Role of Federal Agencies in Supporting Research & Technology Development

All of this would not have been possible without the support of the National Science Foundation who believed in our mission of AI for social good. The NSF bridges the crucial gap between scientific research and operational impact. We participated in the NSF I-Corps Program before receiving funding, and found it invaluable. The I-Corps Program meets a crucial need for commercialization of university research, because it provides a training ground before entrepreneurs launch.

The funding we received through the NSF SBIR has been extremely crucial to our success. SBIR focuses on high-risk, high-reward research, which is important because criminals move so fast online that innovation is needed to keep pace.

Now that we have grown from a startup to a small business, we would encourage you to help NSF and the SBIR Program provide more exposure to potential federal government customer relationships and reduce procurement challenges for up-and-coming businesses who serve the public sector. We encourage continued authorization of funding for NSF to do this work, because it is driving the ingenuity that we need to solve these serious, worldwide problems.

I look forward to your questions. Thank you.