



# Criminal Investigations and Network Analysis Center (CINA)

### A DHS Center of Excellence

CINA develops strategies and solutions to enhance criminal network analysis, forensics, and investigative processes for on-the-ground use by agents and officers to counteract transnational crime.

LAUNCH ▶

2017

PARTNERS ▶

More than nine university partners

**EXPERTISE** ▶

Network analysis, forensic science, criminology, multimedia content analysis, data analytics, social media analysis, criminal investigations, voice and video analytics

DHS ALIGNMENT ▶

U.S. Immigration and Customs Enforcement, U.S. Customs and Border Protection, U.S. Coast Guard, Federal Law Enforcement Training Center, U.S. Secret Service, DHS Office of Policy, Transportation Security Administration

# **Feedback from Our Partners**

"By partnering with George Mason University and other institutions, our agents will be able to work with cutting-edge tools and research that will shape how we combat the growing threat of transnational crime."

**Derek N. Benner**, Acting Executive Associate Director Homeland Security Investigations, U.S. Immigration and Customs Enforcement, 2017

"Our selection committee tapped Mason to lead the center due to its researchers' tremendous scientific expertise to analyze criminal activity across multiple domains—physical, cyber, social media—and their ability to act quickly and efficiently."

**Dr. Matthew Clark**, Director DHS S&T Office of University Programs, 2017

# Research and Education Capabilities

- Criminal network analysis and predictive analytics
- Dynamic patterns of criminal activity analysis
- Voice and video forensics
- Education and training for the current and future homeland security workforce



A nationwide consortium led by:

#### **George Mason University**

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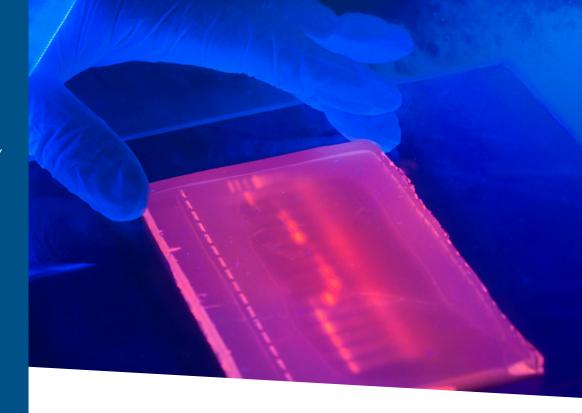
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### **University Partners**

Carnegie Mellon University, PA Michigan State University, MI Norfolk State University, VA\* Purdue University, IN Rensselaer Polytechnic University, NY Rutgers University, NJ Temple University, PA University of Notre Dame, IN University of Texas, San Antonio, TX

\*Minority Serving Institution (MSI)



# **Impacts**

# **Countering criminal networks**

Transnational criminal organizations operate across the nexus of physical, cyber, and social space. CINA researchers are developing innovative approaches to understanding the complex structure and operations of such networks and how to counter criminal activity.

# **Identifying fake distress calls**

CINA investigators are developing solutions to address audio and video analytics, in support of diverse operations, from assessing the veracity of distress calls received by the U.S. Coast Guard, to enhancing video surveillance operations.

### Harvesting actionable knowledge through social media and open source analytics

CINA researchers are using open worldwide sources such as news feeds and social media in order to identify precursors of variations in criminal network activities in the United States.

# **Disrupting human trafficking**

CINA researchers are advancing the understanding of the international footprint and complex nature of human trafficking activities in the United States and their observable operational patterns.





For a complete list of partners and more information, please visit cina.gmu.edu

For more information on DHS Centers of Excellence, please visit hsuniversityprograms.org

