The speed of technological innovation has resulted in expanded capabilities for adversaries and greater parity across the board. Join the FBI’s Science and Technology Branch (STB) as they discuss emerging technologies and the complexities they are creating in today’s threat environment. The speakers will highlight the importance of partnerships and what the STB is doing to counter threats associated with emerging technologies. Topics will include:

⇒ INVESTIGATIVE GENEALOGY:
Decades-long unsolved homicide cases are being successfully resolved using the technique of investigative genealogy. For over forty years, the Golden State Killer case remained unsolved until investigative genealogy was used to identify the killer. Investigative genealogy is raising concerns from bioethics and privacy perspectives because the genetic information used is voluntarily provided by people who are interested in learning about their health or their family history, and because people who use commercial DNA databases may not anticipate law enforcement searches when they provide their information. Our speaker will discuss these implications and more!

⇒ BIOMETRICS/BIOMETRIC AUTHENTICATION/BIOMETRIC SPOOFING: Fingerprint, iris, and facial recognition are prevalent secure identification technologies. But they are not foolproof. New computer devices, access control systems, cars, and home automation kits are offering biometrics as a way to conveniently access systems. The speaker will highlight the realities of biometric spoofing and discuss countermeasures to help keep our homes and businesses safe.

⇒ VIDEO ANALYTICS: Advances in wireless communication technology coupled with smartphone video capabilities have drastically increased the FBI’s video collection and analysis requirements. The speaker will give an overview of how the FBI leverages video analytics to triage mass multimedia collections and overcome big data challenges. The speaker will also discuss how adversaries are using emerging technologies like deepfake videos.