



# WORKSHOPS

*Registration Fee: \$50 through Jan. 18; \$100 effective Jan. 19*

## **W3 Scientific Working Group on Digital Evidence (SWGDE) and Digital Evidence: The Look of Modern Criminal Investigations**

**Monday**

**February 15, 2021**

**8:00 a.m. – 12:00 p.m.**

**3.75 CE Hours**

**Learning Overview:** The goal of this presentation is to provide attendees with an overall view of the various types of digital forensic examinations and technical work being performed by members of SWGDE that can be applied in the attendees' day-to-day work.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by increasing awareness among the general population of forensic scientists of the work in digital forensics and by making digital forensic practitioners aware of the useful resources, guidance, and best practices available from SWGDE.

*Chair:*

**Mary F. Horvath, MFS**  
Fort Myers, FL

*Co-Chair:*

**Brandon Epstein, BS**  
Middlesex County Prosecutor's Office  
New Brunswick, NJ

*Faculty:*

**James Darnell, BS**  
United States Secret Service  
University of Tulsa, Fisher Hall  
Tulsa, OK

**James R. Lyle, PhD**  
National Institute of Standards and Technology  
Gaithersburg, MD

**Matthew Domanic, BA**  
VTO, Inc  
Broomfield, CO

**Bertram Lyons, MA**  
Medex Forensics  
Brooklyn, NY

**Virginia Franqueira, PhD**  
University of Kent  
School of Computing  
Canterbury, UNITED KINGDOM

**Patricia Mullaney, BS**  
Virginia Department of Forensic Science  
Richmond, VA

**Catalin Grigoras, PhD**  
National Center for Media Forensics  
University of Colorado Denver  
Denver, CO

**Nicole R. Odom, MSFS**  
Virginia Department of Forensic Science—Central  
Richmond, VA

**Barbara Guttman, BA**  
National Institute of Standards and Technology  
Gaithersburg, MD

**Joseph Remy, JD**  
Burlington County Prosecutor's Office  
Mount Holly, NJ

**Graeme Horsman**  
Teesside University  
Middlesbrough, UNITED KINGDOM

**Steven B. Watson, BA**  
VTO, Inc  
Broomfield, CO

**James Howe, BA**  
Columbus Division of Police  
Columbus, OH

**Cole Whitecotton, MSc**  
National Center for Media Forensics  
University of Colorado Denver  
Denver, CO



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**Targeted Audience:** Digital & Multimedia Sciences, General, Jurisprudence

**Knowledge Level Required:** Intermediate (some knowledge of subject presented)

**Expected Handout Length:** 60 pages

**Program Description:** This presentation will provide an overview of topical and fundamental work taking place in multiple digital forensic technical areas, including social media, geolocation, audio, video, cloud acquisitions, and software validation, by members of SWGDE.

### **Program:**

8:00 a.m.	-	8:15 a.m.	<b>SWGDE Introduction and Update</b> <i>Mary F. Horvath, MFS; Brandon Epstein, BS</i>
8:15 a.m.	-	8:40 a.m.	<b>Demonstrating Confidence in the Reliability of Digital Forensic Tools</b> <i>Barbara Guttman, BA; James R. Lyle, PhD</i>
8:40 a.m.	-	9:05 a.m.	<b>Validating Software Results: An Example of Why It Is Necessary and How to Mitigate a Problem</b> <i>James Darnell, BS; Steven B. Watson, BA</i>
9:05 a.m.	-	9:30 a.m.	<b>The Use of Structured Argumentation to Support Conclusions: A Video Authentication Case Study</b> <i>Patricia Mullaney, BS; Virginia Franqueira, BS; Graeme Horsman; Joseph Remy, BS</i>
9:30 a.m.	-	9:50 a.m.	<b>Break</b>
9:50 a.m.	-	10:15 a.m.	<b>Advances on Microphone Attribution in Audio Forensics</b> <i>Catalin Grigoras, PhD; Cole Whitecotton, MSc</i>
10:15 a.m.	-	10:40 a.m.	<b>Teardown Methods of Internet of Things (IoT) Devices</b> <i>Nicole R. Odom, MSFS; Matthew Domanic, BA</i>
10:40 a.m.	-	11:05 a.m.	<b>Video Acquisition From Social Media and the Cloud</b> <i>Brandon Epstein, BS; Bertram Lyons, BS</i>
11:05 a.m.	-	11:30 a.m.	<b>Using Google® Location Data for Investigative Purposes</b> <i>James Howe, BS; Mary F. Horvath, MFS</i>
11:30 a.m.	-	12:00 p.m.	<b>Closing Remarks and Questions</b> <i>Mary F. Horvath, MFS; Brandon Epstein, BS</i>