NICK BARREIRO BAC, AVFA, DIVRT, AFCE

Chief Forensic Analyst 615-854-8055 nick@principleforensics.com

Principle Forensics LLC 6688 Nolensville Rd, Suite 108-129 Brentwood, TN 37027

CURRICULUM VITAE

CERTIFICATIONS

Certified Audio Video Forensic Analyst (AVFA)

Electronic Technicians Association

Digital Imaging and Video Recovery Team (DIVRT)

Federal Bureau of Investigation

Amped FIVE Certified Examiner (AFCE)

Amped Software

Certified Robbery/Homicide Investigator

Robert Presley Institute of Criminal Investigation

Certified Advanced Peace Officer

California Commission on Peace Officer Standards and Training

EXPERT DISCIPLINES

Video, Audio, and Image Forensics

- Evidence Recovery
- Authentication
- Enhancement
- Synchronization
- Analysis
- Redaction
- Photogrammetry
- Speed Calculation
- Facial Recognition
- License Plate Recognition
- Comparative Analysis
- Court Exhibit Preparation

EDUCATION

Yuba College - Administration of Justice

2006

Police Academy Marysville, California

University of California at Davis

1998 - 2002

Major in Communications Davis, California

CONTINUING EDUCATION & TRAINING

2024 AES International Conference on Audio Forensics

June 27 - 29, 2024

Audio Engineering Society

- Artificial Intelligence (A.I.) tools and the future of audio forensics
- Synthetic speech detection and voice comparison
- Forensic automatic speaker recognition
- Deepfake audio generation and detection
- Advanced synchronization of audio and video recordings
- Analysis and presentation of evidence with SpectraLayers
- Forensic gunshot audio analysis

A.I. Generated Audio and Python 101

June 24 - 26, 2024

University of Colorado Denver, National Center for Media Forensics

- Principles of Artificial Intelligence (A.I.) related to audio forensics
- Forensic audio analysis, processing, and generation
- Speech analysis and synthetic voice generation
- Python environments and programming concepts
- Practical exercises using open-source libraries, custom code, and applications

Amped User Days 2024

February 27 - 29, 2024

Amped Software

- Concepts and principles for the use of video evidence
- Technology used in the Amped ecosystem
- Enhancement and analysis of image and video evidence
- Authentication of digital media, including detection of Artificial Intelligence (A.I.) generated imagery
- Discussions on new product features and market insights
- Presentations from Amped Software staff and guest speakers

Fusion-Based Digital Visual Media Forensics

May 26-27, 2023

eForensics, Hakin9 Media

- Fusion-based image and video forensics
- Recognizing uncertainty and ambiguity in digital visual media forensics

- Fusion-based techniques used in tamper detection, evidence authentication, and source identification
- Analysis of the factors that cause ambiguities in forensic artifacts
- Integration-based vs. fusion-based forensic solutions
- Theories and strategies for handling uncertain, conflicting, or incomplete pieces of evidence

Forensic Image and Video Enhancement

March 20 - 24, 2023

Amped Software

- Fundamentals of image and video processing
- · Artifacts introduced during the creation of recorded evidence
- Methods for addressing the most common forensic issues using enhancement, restoration, and analysis filters and tools
- Critical analysis of digital media, including image comparison, height analysis, timing analysis, etc.
- Forensically sound workflow and reporting according to scientific and judiciary constraints

Advanced Forensic Audio Analysis & Processing

December 2, 2022

Resolution Video

- Advanced audio enhancement processes
- Multitrack mixing and editing techniques
- Batch processing of audio files
- Audio streams from video: stripping, muxing, and synchronizing
- Background noise removal using cross-channel adaptive filtering
- Gunshot audio signal analysis

Adobe Premiere for Forensic Video Analysts

November 8 - 10, 2022

Resolution Video

- The forensic video analysis workflow in Adobe Premiere
- Advanced toolset and filters for examining video evidence
- Utilizing Premiere to create and synchronize video timelines
- Processing techniques that enhance the quality of video evidence
- Methods for redacting video and audio for public release
- Producing derivative evidence and demonstrative products

Advanced Forensic Audio Enhancement & Processing

May 9 - 12, 2022

University of Colorado Denver, National Center for Media Forensics

- Deep exploration of digital multimedia processing
- Forensic audio equipment, software, and methods
- Advanced techniques for enhancing recorded audio
- Filtering, noise reduction, and cross-channel adaptive filtering
- Audio processing for increased intelligibility
- Working with audio files from video recordings
- Batch processing with ffmpeg and other command line utilities

LEVA Digital Multimedia Evidence Training Symposium October 18 - 22, 2021 LEVA International, Inc.

- Interactive video authentication, detecting manipulations
- Integrating video data from disparate sources
- Photogrammetry (distance, time, and speed) and error calculation
- Emerging digital evidence considerations, challenges, and opportunities
- · Report writing fundamentals for forensic video analysis
- Courtroom trial preparation of technical evidence

Adobe Photoshop for Forensic Video Analysts

May 10 - 13, 2021

Resolution Video

- Maximizing image quality when exporting a forensic video image
- Workflow efficiency for processing images from video evidence
- Pixel aspect ratio correction techniques
- Photogrammetry, measurements, reverse projection, error calculation
- Custom filters for de-blurring, sharpening, and pattern elimination
- Applying color isolation processes for image clarification

Digital Video Forensics

May 3 - 5, 2021

eForensics, Hakin9 Media

- Contemporary video forensic technologies and processes
- Video forensic investigation procedures
- Technical issues related to digital video processing
- Video content authentication and forgery/tampering detection
- Digital videos as evidence within and beyond the justice system
- Recovery, enhancement, analysis, and interpretation of video evidence

Forensic Analysis and Enhancement of Digital Audio March 29 - April 1, 2021 University of Colorado Denver, National Center for Media Forensics

- Practical fundamentals in digital audio theory
- Forensic audio handling and enhancement
- Digital evidence tools and noise reduction
- Recovery of digital audio and stereo source separation
- · Spectral tools for forensic analysis
- FFT spectrum and spectrogram

Forensic Analysis and Authentication of Digital Audio March 15 - 18, 2021

University of Colorado Denver, National Center for Media Forensics

- Digital audio authentication techniques
- Admissibility of digital audio evidence
- Counterfeit detection and digital data analysis
- Compression level analysis
- ENF collection and comparison

Forensic Analysis and Authentication of Digital Images

March 1 - 4, 2021

University of Colorado Denver, National Center for Media Forensics

- Authentication of digital images and manipulation detection
- Image evidence admissibility
- Image manipulation detection
- EXIF data analysis
- Recompression analysis
- Photo response non-uniformity

Robbery Investigation (ICI)

September 30 - October 4, 2019

Robert Presley Institute of Criminal Investigation

- Video evidence analysis
- Examination of robbery case studies
- Elements of the crime, developing patterns, and dynamics
- Techniques and strategies to develop a successful investigation
- Interpretation and application of laws related to robbery
- Suspect identification techniques
- Courtroom testimony

Digital Imaging and Video Recovery

March 19 - 20, 2019

Federal Bureau of Investigation

- Video forensics
- Evidence retrieval from digital video recorders
- Documentation of critical system information
- Preservation of collected evidence
- Enhancing video evidence
- · Considerations when releasing video to the media

Homicide Investigation (ICI)

January 21 - February 1, 2019

Robert Presley Institute of Criminal Investigation

- Evidence collection, crime scene analysis, and chain-of-custody
- Electronic investigations and video forensics
- Arson and terrorism investigations
- Forensic pathology, odontology, entomology, and anthropology
- The role of the media
- Interpretation of homicide law and preparation for testimony

Officer-Involved Shooting/Force Investigation (ICI)

December 10 - 14, 2018

Robert Presley Institute of Criminal Investigation

- Critical incidents: officer-involved shootings, use of force, etc.
- The importance of video forensics in critical incidents
- Contemporary critical incident case studies
- Administrative investigations, legal considerations, media relations, and courtroom testimony

Death Investigation

May 21 - 22, 2018

3rd Degree Communications

- Crime scene management
- Officer-involved shootings and in-custody deaths
- Wound recognition, apparent suicide, and apparent accidental death
- Evidence recognition, photography, and documentation

Robbery Investigation

November 14, 2017

3rd Degree Communications

- Management of major robbery investigations
- Surveillance video and evidence collection
- Identification of crime patterns and resources
- Suspect identification, interview, and interrogation techniques

Electronic Surveillance

June 9, 2017

State of California Department of Justice

- Electronic surveillance and pen registers
- Intercepting and recording wire communications
- Practical and tactical aspects of operating and monitoring a wiretap

Criminal Investigation Core Course (ICI)

January 9 - 20, 2017

Robert Presley Institute of Criminal Investigation

- Surveillance techniques, interview and interrogation
- Crime scene management and reconstruction
- Search & seizure law and preparation of search warrants
- Documentation, case management, case presentation
- Courtroom testimony

FaceSearch Facial Recognition

July 28, 2016

Vigilant Solutions

- Forensic facial recognition technology and databases
- Image comparison and facial identification
- Filtering and editing techniques
- Facial recognition vs. facial comparison

Automated License Plate Reader

September 26, 2014

Central California Intelligence Center, Sacramento RTAC

- License plate reader cameras, databases, and technology
- Real-time and historical data
- Data analysis, advanced queries, and geo-fence analysis

ORK EXPERIENCE	
Forensics Principle Forensics LLC, Nashville, TN Chief Forensic Analyst • Forensic Video, Audio, and Image Investigations • Authentication of Recorded Evidence • Enhancement and Analysis of Video, Audio, and Images • Synchronization and Redaction of Evidence • Derivative Evidence and Demonstrative Exhibits • Professional Litigation Support • Expert Witness Testimony	2020 - Present
Law Enforcement West Sacramento Police Department, West Sacramento, CA Patrol Sergeant Patrol Supervisor / Technology Project Manager Media Forensics Body-Worn & Dash Cameras Digital Evidence System License Plate Readers	2019 - 2020
 Facial Recognition Technology Detective Forensic Video Investigations Crimes Against Persons Investigations Robbery, Homicide, Felony Assaults 	2016 - 2019
 Officer-Involved Shootings Patrol Officer Digital Evidence Specialist Surveillance Video Recovery Expert 	2006 - 2016
Audio Engineering / Production KBMB Radio, Sacramento, CA On-Air Audio Mixing	2001 - 2003
The Graduate, Davis, CAAudio Mixing and Production	1998 - 2002

ACHIEVEMENTS & AWARDS

Amped FIVE Examiner Certification

2024

Amped Software

Certification in the principles of image and video enhancement and processing, forensic video analysis, as well as Amped FIVE features and workflows, achieved through a comprehensive theoretical and practical examination process.

Audio Video Forensic Analyst Certification

2021

Electronic Technicians Association

Certification in the enhancement and analysis of audio and video digital recordings, handling of evidence in accordance with the highest ethical standards, preparation of expert testimony in the service of justice, industry best practices, and rules of evidence.

Certificate of Commendation

2020

West Sacramento Police Department

In recognition of exceptional performance of duty utilizing specialized skills in video forensics that were vital in several major investigations and resulted in significant arrests and convictions.

ICI Certificate of Achievement in Homicide Investigation

2019

Robert Presley Institute of Criminal Investigation

Individuals who have demonstrated a sustained desire, discipline, and determination to refine their investigative craft by devoting approximately 200 hours of training to qualify for an ICI Certificate in Homicide Investigation.

ICI Certificate of Achievement in Robbery Investigation

2019

Robert Presley Institute of Criminal Investigation

Individuals who have demonstrated a sustained desire, discipline, and determination to refine their investigative craft by devoting approximately 200 hours of training to qualify for an ICI Certificate in Robbery Investigation.

Digital Imaging and Video Recovery Team Member

2019

Federal Bureau of Investigation

The Digital Imaging and Video Recovery Team (DIVRT) is comprised of state, local and federal law enforcement officers working jointly with FBI's Forensic Audio, Video and Image Analysis Unit (FAVIAU) to provide instruction in the retrieval and dissemination of digital video evidence.

Commanding Officer's Citation

2017

West Sacramento Police Department

In recognition of dedication, professionalism, compassion, and teamwork in response to a homicide investigation in September of 2017.

Advanced Peace Officer Certificate

2012

California Commission on Peace Officer Standards and Training

Awarded to full-time peace officers who have fulfilled the requirements for character, education, training, and experience, as prescribed in Title 11, Division 2, of the California Code of Regulations.

Intermediate Peace Officer Certificate

2010

California Commission on Peace Officer Standards and Training

Awarded to full-time peace officers who possess a Basic Certificate and who have acquired the specified training and education points and/or college degree and the prescribed years of law enforcement experience.

Basic Peace Officer Certificate

2008

California Commission on Peace Officer Standards and Training
Awarded to full-time peace officers who have satisfactorily completed the
prerequisite Basic Course requirement and the employing agency's
probationary period.

SELECT CASES & TESTIMONY

I have conducted over a thousand forensic audio, video, and image investigations in the United States and internationally. Below is a sample of cases in which I was involved:

D.A. vs. California Department of Corrections & Rehabilitation

(24-1382)

State Personnel Board - State of California

Peace Officer discipline

- Forensic video enhancement and analysis
- Timeline sequence reconstruction and synchronization
- Demonstrative court exhibit preparation
- Expert witness testimony

State vs. Ronald Witham

(213-2023-CR-00401)

Superior Court of New Hampshire - County of Cheshire

Criminal assault case

- Forensic video enhancement and analysis
- Timeline sequence reconstruction and synchronization
- Demonstrative court exhibit preparation
- Expert witness testimony

United States vs. Todrian Laphand

(3:23CR122-HTW-FKB)

US District Court – Southern District of New York

Wiretap narcotics case

- Forensic audio authentication
- Forensic comparative analysis
- Demonstrative court exhibit preparation
- Expert witness testimony

James R. Harris vs. David Ballard

(CC-35-2011-C-397)

West Virginia Supreme Court of Appeals – County of Ohio Sexual assault case

- Forensic video authentication and enhancement
- Timeline sequence reconstruction and synchronization
- Surveillance system inspection and analysis
- Demonstrative court exhibit preparation
- Expert witness testimony

State vs. Terence Trent Vos

(211906340)

3rd District Court of Utah – County of Salt Lake

Aggravated murder case

- Forensic audio analysis
- Opposing expert report analysis
- Cross-examination planning
- Expert witness testimony

Basil Cyrus vs. Metropolitan Transit Authority et al.

(CV-23-171)

US District Court – Eastern District of New York

Civil rights case

- Forensic video authentication
- Forensic video analysis
- Expert witness testimony

Carmon vs. City of New Haven et al.

(3:23-CV-00944)

US District Court – District of Connecticut

Civil rights case

- Forensic audio analysis
- · Opposing expert report analysis
- Expert witness testimony

Marlene Rodriguez et al. vs. FedEx Freight, Inc. et al.

(2021-63834)

District Court of Harris County - State of Texas

Wrongful death case

- Forensic video enhancement
- Exemplar recording creation
- Forensic video analysis
- Demonstrative court exhibit preparation
- Expert witness testimony

Minskoff vs. Mendoza Jr.

(23-CV-584-BMC)

US District Court – Eastern District of New York

Personal injury case

- Forensic video authentication
- Confirmation of evidence authenticity
- Forensic image analysis
- Forensic audio analysis
- Expert witness testimony

State vs. Brian Hilton Earl

(31-2020-CF-000871-A)

15th Judicial Circuit of Florida – County of Indian River Child abuse case

- Pretext call recording analysis
- Forensic audio authentication
- Expert witness testimony

Samuels vs. Plambeck

(2023CA000365AX)

12th Judicial Circuit of Florida – County of Manatee

Personal injury case

- Forensic video analysis
- Digital video recorder hardware examination
- Timestamp analysis
- Timeline sequence reconstruction

Commonwealth of Virginia vs. Juliana Peres Magalhaes

(FE-2024-0000226)

Circuit Court of Fairfax County - State of Virginia

Homicide case

- Forensic audio analysis
- Exemplar Comparison
- Demonstrative court exhibit preparation

Morant vs. City of New Haven et al.

(3:22-CV-00630)

US District Court – District of Connecticut

Civil rights case

- Forensic audio analysis
- · Opposing expert report analysis
- Expert witness testimony

Johnson vs. Johnson

(FAMBA2301208)

Superior Court of California - County of San Bernardino

Family law case with falsified evidence

- Forensic audio authentication and analysis
- Exemplar recording creation
- Detection of evidence tampering
- Expert witness testimony

R. vs. Beryl Musila

(170772719Q1)

Alberta Court of King's Bench, Canada

First-degree murder case

- Forensic video authentication and analysis
- Timeline sequence reconstruction and synchronization
- Motion detection analysis
- Expert witness testimony

Thomas vs. Wren

(22-CVD-1159)

North Carolina General Court of Justice - County of Henderson Family law case with false accusation of evidence tampering

- Opposing expert report analysis
- Forensic audio authentication and analysis
- Confirmation of evidence authenticity
- Demonstrative court exhibit preparation
- Expert witness testimony

State vs. Steve G. Wade

(2022-CR-00366)

Ohio Court of Common Pleas - County of Licking

Child abuse case

- Forensic video analysis and authentication
- Forensic comparative analysis
- Expert witness testimony

State vs. Deangelo Wiggins

(21CR0615001)

Circuit Court of Cook County – State of Illinois Carjacking case

- Forensic video analysis
- Still frame capture
- Forensic image enhancement
- Forensic comparative analysis
- Demonstrative court exhibit preparation
- Expert witness testimony

Hong vs. Yang

(FL-2020-768, FL-2021-1434)

Superior Court of California - County of Yolo

Family law case with falsified evidence

- Forensic video and image authentication
- Forensic image analysis
- Detection of evidence tampering
- Demonstrative court exhibit preparation
- Expert witness testimony

Crummy vs. Sonoco Products Company

(2020-CP-16-00592)

South Carolina Court of Common Pleas – County of Darlington

Wrongful Death Case

- Forensic video authentication
- Timeline sequence reconstruction and synchronization
- Forensic video enhancement
- Distance and speed calculation
- Forensic audio enhancement
- Expert witness testimony

Baxter vs. City of Hemet

(5:21-cv-0133-JWH-SP)

US District Court – Central District of California

Law enforcement excessive force allegation

- Opposing expert report analysis
- Forensic audio authentication
- Forensic video authentication
- Chain of custody analysis
- Expert witness testimony

State vs. Christian Braun

(22-M-00319)

Madison District Court – Commonwealth of Kentucky

Criminal Assault case

- Forensic audio authentication and analysis
- Exemplar recording creation
- Detection of evidence tampering
- Expert witness testimony
- Falsified evidence excluded in court

William Sands vs. District of Columbia et al.

(2021-CA-000699-B)

Superior Court of the District of Columbia

Law enforcement excessive force allegation

- Forensic video authentication
- Forensic video enhancement and analysis
- Timeline sequence reconstruction and synchronization
- Photogrammetry
- Expert witness testimony

Hobbs vs. Select Property Management, Inc.

(RG19030825)

Superior Court of California - County of Alameda

Civil harassment case

- Forensic video and image authentication and analysis
- Surveillance system layout analysis
- Expert witness testimony

Clewett vs. New Wave Power et al.

(3:21-CV-00692-S)

US District Court – Northern District of Texas, Dallas Division Class action lawsuit

- Forensic audio authentication and analysis
 - Forensic comparative analysis
 - Detection of evidence tampering
 - Demonstrative court exhibit preparation

Double Murder Investigation

(OPD-18-021678)

Oakland Police Department, California

Homicide case

- Forensic video authentication
- Forensic video enhancement and analysis
- Timeline sequence reconstruction and synchronization
- Demonstrative court exhibit preparation

State vs. Albert Rodriguez Lewis

(21-CF-006935AMB)

15th Judicial Circuit of Florida – County of Palm Beach Attempted homicide case

- Forensic video authentication and analysis
- Expert witness testimony

Kenneth Frazier Jr. vs. Norfolk Southern Railway Co.

(CA-20-C-69)

Circuit Court of West Virginia – County of Mingo

Personal injury case

- Forensic audio analysis
- Forensic audio enhancement
- Expert witness testimony

Riffel vs. Redding West Senior Living, LLC

(19-7446)

Superior Court of California - County of Shasta

Wrongful death case

- On-site surveillance system analysis
- Forensic digital video recorder examination
- Forensic video authentication and analysis
- Timeline sequence reconstruction

Rodock vs. Moore et al.

(21-2050-DDC-JPO)

US District Court - District of Kansas

Personal injury malpractice case

- Forensic audio analysis
- Forensic audio enhancement
- Expert witness testimony

Provatas vs. Creek House Seafood and Grill, LLC

(STCV19-00197)

Georgia State Court - County of Chatham

Wrongful death case

- Forensic video evidence recovery and authentication
- Forensic video enhancement and analysis
- Super-resolution imaging
- Demonstrative court exhibit preparation
- Expert witness testimony

Rowan Altahrawi vs. Jafar Altahrawi

(2019-OP-0002424)

17th Judicial Circuit Court of Illinois – County of Winnebago

Family law case with falsified evidence

- Forensic audio authentication and analysis
- Detection of evidence tampering
- Expert witness testimony
- Falsified evidence excluded in court

State of North Carolina vs. James William Durner

(21-CR-50487)

Superior Court of North Carolina – County of Carteret Homicide case

- Forensic video enhancement
- Forensic video analysis
- Demonstrative court exhibit preparation

Officer-Involved Shooting of Jonathan Ramirez

(OPD-20-054365)

Oakland Police Department, California

- Forensic video authentication
- Forensic video enhancement and analysis
- Forensic audio analysis
- Timeline sequence reconstruction and synchronization

State of North Carolina vs. Ramone Alston

(COA-19-346)

Court of Appeals of North Carolina

Homicide conviction appeal

- Forensic video and image authentication
- Forensic video and image enhancement
- Forensic video analysis
- Still frame capture

People vs. Daryoush Sameyah

(LAC9CJ04260-01)

Superior Court of California - County of Los Angeles

Assault with a deadly weapon

- Forensic audio analysis
- Forensic audio authentication
- Detection of evidence tampering

McCray vs. Alexander Jr.

(2018-164)

Circuit Court of the 21st District – Williamson County, TN

Wrongful death case

- Opposing expert report analysis
- Forensic audio and image analysis
- Forensic video enhancement
- Demonstrative court exhibit preparation
- Expert witness testimony

Evans vs. Gorgenkon et al.

(0300631/2017)

Superior Court of New York – County of Bronx

Vehicle accident case

- Forensic video enhancement
- Forensic video authentication
- Forensic video analysis

A.W. vs. Stellar Restaurant Group, Inc.

(2084-CV-00657)

Superior Court of Massachusetts – County of Suffolk

Personal injury case

- Opposing expert report analysis
- Forensic video authentication and enhancement
- Forensic video analysis

Officer-Involved Shooting of Robert Coleman

(DPD-20-03981)

West Sacramento Police Department, California

- Forensic video authentication and analysis
- Forensic video enhancement
- Forensic video synchronization
- Video preparation for public release

Officer-Involved Shooting of Christopher Gray

(WSP-19-07523)

Davis Police Department, California

- Forensic video enhancement
- Forensic video synchronization
- Forensic video analysis
- Still frame capture
- Demonstrative exhibit preparation

State of California vs. Jacob Oehlcke

(CR-2020-4149)

Superior Court of California - County of Yolo

Robbery/Homicide case

- Forensic video analysis
- Forensic video enhancement
- Court testimony

State of California vs. Tuala Auimatagi

(CR-2019-4995)

Superior Court of California - County of Yolo

Homicide case involving hundreds of hours of surveillance video

- Forensic video evidence recovery and authentication
- Forensic video enhancement and synchronization
- Forensic video analysis and still frame capture
- Demonstrative exhibit preparation
- Court testimony

State of California vs. Dominique Jackson

(CR-2019-6376)

Superior Court of California - County of Yolo

Sexual assault case

- Forensic video evidence recovery
- Forensic video authentication and enhancement
- Forensic video analysis and still frame capture
- Court Testimony

State of California vs. Joshua Bolden

(CR-2019-4186)

Superior Court of California - County of Yolo

Armed robbery case

- Forensic video evidence recovery
- Forensic video authentication and analysis
- Court testimony

State of California vs. Steven Ferris

(CR-2019-2476)

Superior Court of California - County of Yolo Robbery case

- Forensic video authentication
- Forensic video enhancement and analysis
- Still frame capture
- Court testimony

State of California vs. Terrance Ivory

(CR-2018-5165)

Superior Court of California - County of Yolo

Child abuse case

- Forensic video authentication
- Forensic video analysis
- Still frame capture
- Court testimony

State of California vs. Larry Duncan

(CR-2018-4948)

Superior Court of California - County of Yolo

Assault with a deadly weapon case

- Forensic video evidence recovery
- Forensic video authentication and analysis
- Court testimony

State of California vs. Bryant Coulson

(CR-2018-4292)

Superior Court of California - County of Yolo Burglary case

- Forensic video authentication and analysis
- Still frame capture
- Facial recognition

PROFESSIONAL AFFILIATIONS

International Association for Identification - Active Member theiai.org

Audio Engineering Society - Active Member

aes2.org

Electronics Technicians Association International - Active Member etai.org

PUBLICATIONS, SPEAKING ENGAGEMENTS, INSTRUCTION, & MEDIA

Proactive Strategies for Multimedia Security in the Age of A.I.

March 2025

Instructor, 2025 Bodyguards for Kids, Athena Worldwide

Georgia Election Official Investigation – Video and Image Analysis October 2024 Media Consultant, Doug Bock Clark, ProPublica

The Power of Audio, Video, and Image Evidence
Instructor, Tennessee Defense Lawyers Association

June 2023

instructor, Termessee Detense Lawyers Association

Nigerian Military Execution – Video Enhancement and Analysis

March 2023

Media Consultant, Reade Levinson, Reuters News

Ghislaine Maxwell Photograph Authenticity

January 2023

Media Consultant, Fox News

Understanding Video and Audio Forensics

November 2022

Instructor, Georgia Association of Professional Private Investigators

Why Security Camera Footage Still Sucks – Cheddar Explains

August 2022

Interview, Cheddar News, cheddar.com

Orsolya Gaal Murder, Queens New York

April 2022

Media Consultant, Fox News

Stop posting pictures with your clients

March 2022

Interview, Athena Worldwide, epbacktobasics.com

Photoshop's Deadly Consequences

August 2021

Published Article, eForensics Magazine, ISSN 2300 6986