Emi Polito CFVA, BTEC

Hatfield Peverel (Chelmsford) ESSEX United Kingdom

Personal statement

I am a LEVA Certified Forensic Video Analyst and I am an expert in imagery analysis and audio/video enhancement. I have provided testimony in court as an expert witness on a number of occasions in the United Kingdom.

Key Skills

- Comparative imagery analysis of humans, clothing items, vehicles and weapons
- Authenticity of video and audio evidence
- Speed and height assessments of video and imagery evidence
- Forensic imagery clarification and enhancement
- Forensic audio restoration, clarification and transcription
- Recovery, retrieval and extraction of CCTV footage from scenes of crimes
- Compiling annotated video and audio evidence together for use in court
- Production of sanitised computer generated post-mortem imagery

Employment History

Forensic Video and Audio Analyst, EPCFVA, Hatfield Peverel, Essex, United Kingdom

(January 2022 – present)

Achievements and responsibilities:

- Supplying forensic analytical services (such as imagery comparison, authenticity analysis and height assessment) to Police forces and defense firms in the United Kingdom
- Performing audio enhancement and transcription services for law enforcement agencies and private firms in the United Kingdom

Forensic Video Expert and Software Trainer, Amped SRL, Trieste, Italy

(January 2022 – present)

Achievements and responsibilities:

- Providing training on forensic imagery processing/analysis using the Amped core products (FIVE, Authenticate and Replay) to law enforcement agencies worldwide
- Providing first line technical support to Amped customers worldwide and supplying user based content for future Amped software upgrades
- Operating from the county of Essex in the United Kingdom

CCTV Evidence Analyst, Essex Police, Chelmsford, Essex, United Kingdom

(April 2018 – January 2022)

Achievements and responsibilities:

- ISO17025 technical lead (CCTV) in Kent and Essex
- Conducting comparative analysis of questioned CCTV against imagery of known persons and objects for the Crown Prosecution Service
- Testifying in court as an imagery and CCTV expert witness
- Processing, clarifying and compiling video and audio evidence for the CPS
- Recovering CCTV footage from DVR systems to aid live investigations

Digital Media Advisor, Essex Police, Colchester, Essex, United Kingdom

(October 2017 – April 2018)

Achievements and responsibilities:

- Performed logical and physical extractions of tablets, feature mobile phones and smartphones using MSAB XRY and ACPO approved forensic procedures to aid prosecution and investigative needs
- Assisting police investigators in the recovery and retention of evidence related to digital media such as cellular phones, CCTV, ANPR and open source data

Forensic Imagery & Audio Analyst, LGC Forensics (now Eurofins Forensics), Fordham, Cambridgeshire, United Kingdom

(February 2016 - October 2017)

Achievements and responsibilities:

- Worked on a vast number of comparative imagery analysis reports for prosecutors and defense solicitors as an expert witness using approved scientific methods which led to successful prosecutions and acquittals. Casework involved facial and body mapping as well as weapon, clothing, object and animal comparison
- Recovered CCTV data from deliberately deleted partitions of hard disk drives using specialist computer forensics software
- Worked on speed and height assessments of CCTV imagery using approved scene reconstruction methods
- Lead Forensic Audio Analyst in the department working on a vast number of audio enhancement and transcription services to aid investigative needs

Director and Lead Forensic Audio-visual Specialist, CP Forensics, Welwyn Garden City, Hertfordshire, United Kingdom

(April 2015 – February 2016)

Achievements and responsibilities:

- Set up limited company as co-director and lead imagery analyst on a private capacity providing forensic audiovisual services for Police forces, private investigators and insurance companies in the United Kingdom
- Liaised directly with customers in regards to assessments and quotations, invoicing, booking in and secure dispatch of forensic evidence operating under ISO 9001 standard operating procedures

Audio-visual Forensic Analyst, Bedfordshire Police, Welwyn Garden City, Hertfordshire, United Kingdom

(May 2010 – April 2015)

Achievements and responsibilities:

- Produced Level 2 audiovisual evidence and content on behalf of three police forces across Hertfordshire, Bedfordshire and Cambridgeshire
- Edited and enhanced CCTV footage, ABE interviews, 999 calls and covert audiovisual recordings. Created body mapping images and bespoke Flash/Return-2-Scene presentations for use in court
- Worked with specialist video and audio enhancement software and with Adobe Premiere/After Effects/Encore for the editing and production of audiovisual evidence
- Recovered and extracted evidential CCTV footage associated to criminal activity from over four hundred CCTV systems within the three counties using expert technical knowledge in image recovery and IP system networking

Freelance Videographer, Camera Operator and Video Editor

(March 2009 - May 2010)

Achievements and responsibilities:

 Operated a videography and freelance editing business as a sole trader. The main bulk of the business includes corporate videos, event videos, commercials, documentaries and wedding film productions

Senior Video Editor and Engineer, Bloomberg Television, London, United Kingdom

(January 2003 – March 2009)

Achievements and responsibilities:

- Put together high-end feature shows, news programmes, promos, commercials and interviews for five multi-language financial news Television channels using a top-end Avid Media Composer non-linear editing suite
- Overseen five non-linear Avid editing suites and a large media networked storage facility
- Responsible for the installation of non-linear editing software, hardware and the day-to-day functioning of all equipment
- Responsible for training producers and journalists in the use of post-production equipment

Technical Director, Bloomberg Television, London, United Kingdom

(July 1998 – December 2002)

Achievements and responsibilities:

- Performed technical operations across the five Bloomberg channels including live vision mixing, audio mixing, camera operating, setting up remote interviews and coordinating other operators in their audio and visual roles in a dynamic, live TV gallery environment
- Overseen the troubleshooting of studio equipment, compiled show reports and organized downtime studio maintenance
- Overseen documentation on the corporate intranet and organized training for junior staff

Academic Background

Video Analysis in Collision Reconstruction – FCIR LTD

(16th October 2023 – 20th October 2023)

- Video/Image theory and timing of video frames
- Positioning techniques and Photogrammetry
- Handling of error and tolerances in assessing speed and positioning

File Analysis and DVR Conversion – Amped Advanced Training, Trieste, Italy

(29th November 2022 – 1st December 2022)

- Media Interrogation, frame/GOP and macroblocks analysis
- Byte level analysis of h264 video
- Advanced video decoding using raw ffmpeg

Amped Authenticate – Forensic Imagery Authentication, Trieste, Italy

(19th September 2022 – 23rd September 2022)

- Fundamentals of image and video generation and compression
- Integrity and the authenticity of digital images and videos
- Global and local image analysis
- Source device identification

Law Enforcement & Emergency Services Video Association (LEVA) Court Testimony Expert Witness Class with Jonathan Hak K.C. on Zoom Pro (28th September 2020 – 30th September 2020)

- Preparation for court and trial procedure
- Performance on the witness stand
- Moot court exercises

LEVA Level 4 – Advanced Forensic Video Analysis and the Law, Crowne Plaza, Nottingham, United Kingdom

(4th November 2019 – 8th November 2019)

- Processing video evidence
- Production of imagery analysis reports
- Development of standard operating procedures
- Presentation of forensic imagery analysis in a moot court scenario

LEVA Level 3 – The Principles of Forensic Video/Image Compare and Contrast, Nottingham Trent University, Nottingham, United Kingdom

(9th September 2019 – 13th September 2019)

- The ACE-VR scientific method
- Imagery comparison of clothing items and vehicles
- Identification of class characteristics and unique characteristics

Media Training LTD - Adobe Audition CC, London, United Kingdom

(4th January 2019)

- Production and editing of audio material
- Clarification of audio recordings

Amped Five – Forensic Imagery and Video Enhancement, Chelmsford, Essex, United Kingdom

(20th February 2018 – 23rd February 2018)

- Issues affecting images and videos in the investigative context
- Basic and advanced enhancement techniques
- Stabilization and frame integration

XRY Certification Training – Kent Police Headquarters, Maidstone, Kent,

United Kingdom

(16th October 2017 – 20th October 2017)

- Extraction of video, audio and imagery data from tablets and cellular phones
- Production of streamlined data reports
- Development of standard operating procedures

LEVA Level 2 – Digital Multimedia Evidence Processing, Greater Manchester Police College, Manchester, United Kingdom

(15th May 2017 – 19th May 2017)

- Audio theory
- Data integrity and authentication
- Digital multimedia extraction
- Forensic non-linear editing
- Infrared light principles

LEVA Level 1 – Forensic Video Analysis and the Law, Greater Manchester Police College, Manchester, United Kingdom

(20th March 2017 – 24th March 2017)

- Introduction to Digital Video and Compression Theory
- Retrieval of CCTV Evidence
- TCP/IP networking
- Technical report writing and time calibration
- File formats, containers and video codecs

LGC Forensics – Facial Anatomy Training, Fordham, Cambridgeshire, United Kingdom

(29th February 2016 – 4th March 2016)

- The history of facial anatomy and identification
- Class, unique and transient characteristics in humans
- Ageing and disguise

Virtual Reconstructions LTD – Body mapping with Autodesk Cinema 4D, Newton Abbott, Devonshire, United Kingdom

(9th January 2012 – 13th January 2012)

- Workflow and basics of the human body anatomy
- Painting the digital body and recreating bruises and skin reddening
- Mapping photos of injuries to 3D digital manikins
- Recreating ballistic and knife trajectories
- Export of graphics and video presentations for court use

VET Authorised Avid Education Centre – Avid 400 Windows System Support, London, United Kingdom

(9th May 2005 – 13th May 2005)

- Installing and troubleshooting Avid Meridien and Adrenaline based systems
- Installation and maintenance of Avid based systems and media management
- ACSR (Avid Certified Support Representative) examination

VET Authorised Avid Education Centre – Avid 201 Advanced Editing Techniques for Avid Media Composer, London, United Kingdom

(7th March 2005 – 8th March 2005)

- Customization of user and project interfaces
- Project management
- Digitizing, consolidating and batching of media
- Advanced navigation and trimming

BBC Training and Development Centre, Wood Norton, United Kingdom (20th March 2000 – 22nd March 2000)

• Studio sound, Lighting and The art of vision mixing

Education

Bromley College of Further and Higher Education – BTEC National Diploma in Multimedia Systems Engineering, Bromley, Kent, United Kingdom (September 1996 – July 1998)

Two years full time education with subjects including mathematics for engineering, electrical and electronic theory, applied electronics, engineering application of computers, television theory, multimedia authoring, studio operations, microelectronic systems and signal transmission principles.

Liceo Scientifico Statale Federigo Enriques – Ostia Lido, Rome, Italy (September 1990 – July 1995)

A levels equivalent Italian secondary education in scientific studies; full time higher education with subjects including Italian literature, English, Latin, mathematics, history, geography, philosophy, design & arts, physical education, chemistry, physics and science.

Professional Association Memberships & Certifications

LEVA (Law Enforcement and Emergency Services Association) – Member (March 2017 - present)

Certified Forensic Video Analyst (CFVA) (November 2021 - present)

National Crime Agency – Expert Adviser on Forensic Video Analysis (*April 2015 – present*)

Chartered Institute of Information Security (CIISP) – Affiliate Member (August 2018 - present)

Forensic Digital Media Working Group (formerly FIAG, a sub-group of the Chartered Society of Forensic Sciences) - Member (February 2016 - present)

Institute of Videography (IOV), Loughton, Essex – Associate Member (May 2009 – May 2011)

Previous Court Experience

- Rex V Liam JONES Murder Trial Reading Crown Court, Reading, Oxfordshire - Judged by Mr Justice Murray 1st / 5th March 2024 – Expert testimony on Forensic Imagery Analysis
- Rex V Richard Lee NORRIS Murder Trial Lincoln Crown Court, Lincoln, Lincolnshire 6th June 2023 – Expert testimony on Forensic Imagery Analysis
- Regina V Jay HURSHAM Attempted Murder Trial Basildon Crown Court, Basildon, Essex 1st/ 2nd December 2021 – Expert testimony on Forensic Imagery Analysis
- Regina V Daniel DADEN Murder Trial Chelmsford Crown Court, Chelmsford, Essex - Judged by HH Charles Gratwicke 14th April 2021 – Expert testimony on Forensic Imagery Analysis
- Regina V Bruce CHIPUNZA Trial Chelmsford Crown Court, Chelmsford, Essex 16th November 2020 – Expert testimony on Forensic Imagery Analysis
- Regina V Ben LACOMBA Murder Trial Woolwich Crown Court, London - Judged by His Honour Christopher Kinch QC 7th October 2019 – Expert testimony on Forensic Imagery Analysis
- Regina V Laurynas MISIUNAS Trial Maidstone Crown Court, Maidstone, Kent - Judged by His Honour Tony Baumgartner 23rd / 24th May 2019 – Expert testimony on Forensic Imagery Analysis
- Regina V Kimaunie SAMSON Trial Snaresbrook Crown Court, London - Judged by His Honour John Lafferty 4th March 2019 – Expert testimony on Forensic Imagery Analysis