# Curriculum Vitae AmyLynn Hak, CFVA

### **Current Employment**



### International Criminal Court, Office of the Prosecutor

Identification Division, Forensic Science Section Oude Waalsdorperweg 10, 2597 AK

The Hague. The Netherlands

Forensic Officer (May 2018 - Present)

- Forensic Science Section (LEVA Certified Forensic Video Analyst)
  - > perform forensic video analysis and examination of evidence
    - comparison analysis and geolocation
  - > expert witness consultation: video and still imaging, latent print examination, and crime scene analysis and document handling
  - design and present learning opportunities for forensic video analysis
- Information Management and Program Evaluation
  - > design and implement forensic video analysis workflow program
  - > draft Forensic Science Section strategies, policies and standard operating procedures
  - develop quality assurance management framework
  - > perform eDisclosure records management and redaction process evaluation for eCourt (Ringtail, Nuix eDiscovery database)
  - act as ICC representative and contributing member for The Hague Evaluation Network and Europol digital forensics strategy meetings

### **Current Education**



Master of Information Management (September 24, 2019) Dalhousie University - Halifax, Nova Scotia, Canada

> Capstone Research – eDisclosure Information Policy Knowledge Management Organization of Information Information Systems and Technology

Program Evaluation
Project Management
User Experience
Management of Privacy

Information, People and Society

Page 1 of 16



### **Employment History**



### ALH. Forensic Video Analysis Ltd.

Owner Operator (May 2014 – May 2018) Certified Forensic Video Analyst

#### Duties include:

- analyze digital video for quality and investigative suitability
- · provide digital video redaction for investigators, as well as the trier of fact
- · provide analysis, comparison and evaluation of video evidence
- · provide speed estimation analysis
- provide 2D/3D scene mapping analysis
- · give expert witness testimony in the field of Forensic Video Analysis
- provide expert analysis and opinion of video and still images for civil matters
- provide records management, archival services and evidence retention for future court proceedings

#### Equipment and Software used:

- · Adobe Premiere non-linear editor
- · Amped FIVE, iNPUT ACE, ffmpeg, Quicktime
- · Ocean systems forensic video analysis software
- · Microsoft PowerPoint, Word and Excel
- · Adobe Acrobat and Creative Cloud (including Photoshop)
- · numerous proprietary digital video players and platforms



### Law Enforcement and Emergency Services Video Association Intl.

Certification Committee Board Member (June 2015 - September 2017) Appointed Volunteer Position



## YMCA Calgary

Gray Family Eau Claire YMCA

Digital Strategist (January 2018 – May 2018) Administration Director (April 2017 – January 2018)

Duty Manager (August 2011 - Present)

Page 2 of 16



#### Duties Include:

- supervised, trained and managed 20 Duty Managers
- performed all Digital Strategy for YMCA Calgary branches
- performed Open Y Website and Mobile App development and support
- planned and directed the records management system
- performed accounting, payroll, human resources, and procurement functions utilizing several enterprise resource planning software platforms
- · updated WordPress website, push notifications and Facebook pages
- implemented technological solutions for scheduling, information sharing and knowledge management within the Duty Manager and Administration teams
- organized and maintained inventory for the Association
- assisted with the health and safety of all members and staff within the facility



### Calgary Police Service - Technological Crimes Unit

Forensic Video Analyst (November 2011 - May 2016)

#### Duties included:

- · analyzed analog and digital video for quality and investigative suitability
- · provided analog and digital conversions for investigative and trier of fact usage
- · provided analog and digital video editing for investigators, as well as the trier of fact
- · provided analysis, comparison and evaluation of video evidence
- provided a detailed report of the scientific method used in image comparison analysis
- gave expert witness testimony in the field of Forensic Video Analysis
- evaluated current work flow and provide innovative solutions for the unit
- assisted with records management, archives and evidence retention for future court proceedings

### Equipment and Software used:

- · AVID and Apple Final Cut Pro non-linear editors
- · Ocean systems forensic video analysis software
- · Microsoft PowerPoint, Word and Excel
- Adobe Acrobat and Creative Cloud (including Photoshop)
- · numerous proprietary digital video players and converters

Page 3 of 16





### Minneapolis Police Department

Forensic Scientist (April 2001 - July 2007 and December 2007 - December 2008) Crime Scene Investigator and Latent Print Examiner

#### Forensic Scientist

#### Duties Included:

- supervised and trained forensic scientists and police officers in the areas of crime scene analysis and latent print examination
- documented crime scenes through 35 mm and digital photography, digital video and sketching
- processed various types of crime scenes and physical items for latent print evidence
- · collected biological and physical evidence from crime scenes
- provided scientific analysis, comparison and evaluation of latent print evidence
- provided scientific and technical expertise in examinations and comparison analysis in the fields of crime scene investigation and latent print analysis
- gave expert testimony in crime scene processing and latent print analysis in court
- researched emerging technologies within the laboratory and performed experimentation to verify techniques
- assisted in writing standard operating procedures and quality assurance documents for ASCLD / ISO 17025 certification
- · assisted with records management and property and evidence retention lifecycles
- utilized various police and criminal justice databases including MN criminal history, booking photos, IAFIS, MAFIN, CAPRS, etc.

#### Forensic Video Analyst

#### Duties Included:

- · analyzed analog and digital video surveillance video evidence
- provided scientific and technical expertise in examinations and comparison analysis
  of forensic video evidence
- gave expert testimony in forensic video analysis and comparison analysis in court

MLI-OTP-0072-0037

Page 4 of 16



#### Saint Cloud Police Department

Forensic Specialist (July 2007 - December 2007)

#### Duties included:

- provided crime scene investigation and latent print analysis
- · provided forensic video analysis
- supervised sworn members within the crime laboratory and ensured they remain current with training and certifications
- researched equipment and new scientific processes for implementation within the laboratory and in the field
- managed and oversaw the expansion of the new crime lab
- assisted in acquiring appropriate crime lab equipment
- · developed strategic plans for acquiring ASCLD accreditation and wrote standard operating procedures
- ensured health and safety guidelines were in place and being followed



### Hennepin County Medical Examiners' Office

Health Care Trainee (2000-2001) Duties included:

· assisted in death investigations within Hennepin County, Minnesota



#### 3M

Microbiology Technician (temporary full-time) (2000-2001) Duties included:

· performed microbiological laboratory work within the sterilization unit

#### **Boston Scientific SCIMED**



Quality Assurance Technician in Microbiology Laboratory (1999-2000) Boston . Quality Assurance reconnician in Chemistry Laboratory (1998-1999)

Research and Development Technician in Chemistry Laboratory (1998-1999) Duties included:

- performed wet chemistry laboratory techniques to assist laboratory scientists within a clean room environment
- performed air and water microbiological laboratory techniques for quality assurance in clean rooms

Page 5 of 16



### **CERTIFICATIONS**

Law Enforcement and Emergency Services Video Association Forensic Video Analyst (October 2006 - Present)

International Association for Identification Crime Scene Analyst (July 2005) Crime Scene Technician (September 2002)

### PROFESSIONAL MEMBERSHIPS

Law Enforcement and Emergency Services Video Association (2002 – Present) International Association for Identification (IAI) (2001 –2008 and 2014 – 2016) Minnesota Division of the IAI (2001 – Dec 2008)

### PREVIOUS EDUCATION



Southern Alberta Institute of Technology (SAIT) 2016 3D Modeling & Design Fundamentals I and II Revit Architecture Fundamentals and Intermediate AutoCAD I, II, and III CADD System Management I



Mount Royal University 2010 General Chemistry Cell Biology Digital Multimedia Technical Writing



St Cloud State University 2007 Graduate Level Biochemistry



Anoka-Ramsey Community College 2004-2005 Organic Chemistry 1 and 2



Post-Baccalaureate Coursework
Hamline University, St Paul, Minnesota 1999
Evidence and the Law
Forensic Archaeology
Survey of Forensic Science

Page 6 of 16





Bachelor of Arts Degree - 1998 Hamline University, St Paul, Minnesota Biology Major / Anthropology Minor Leaders Scholar

### **PROFESSIONAL TRAINING**

Southern Alberta Institute of Technology (SAIT) - Calgary, Alberta Canada 3D Modeling and Design Fundamentals 2 - Intermediate (January 2017)

- 24 hours of specialized training in 3D modelling and animation
- · specialized training utilizing Autodesk 3DS Max software
- intermediate training in the 3D environment, massing, etc.

Law Enforcement and Emergency Services Video Association (LEVA) - Phoenix, Arizona USA

Forensic Video Analysis with Amped FIVE (November 17-18, 2016)

- specialized training utilizing the forensic software Amped FIVE
- specialized training in advanced analysis techniques: macro block analysis, measurements for reverse projection, deblurring, clarification, etc.

Law Enforcement and Emergency Services Video Association (LEVA) 25th Annual Conference and Digital Multimedia Training Symposium

November 2016 Phoenix, Arizona USA

Specialty Workshops Attended:

Validation/Verification

Software Instruction: Adobe Premiere Pro and Adobe Acrobat

Southern Alberta Institute of Technology (SAIT) - Calgary, Alberta Canada 3D Modeling and Design Fundamentals 1 (September - November 2016)

- 24 hours of specialized training in 3D modelling and animation
- specialized training utilizing Autodesk 3DS Max software
- fundamental training in the 3D environment, lighting, photorealistic rendering, etc.

Page 7 of 16



Southern Alberta Institute of Technology (SAIT) - Calgary, Alberta Canada Revit Architecture Fundamentals (April 2016)
Revit Architecture Intermediate (June 2016)

- 68 hours of specialized training
- specialized training in 3D modelling of structures and families
- BIM management training and template, worksheet, phasing, design option creation

Alberta Institute of Technology (SAIT) - Calgary, Alberta Canada AutoCAD Training Series (May 1-30, 2016)

- specialized training in 2D and 3D modelling of various objects and structures
- advanced level of training in the utilization of the powerful AutoCAD software for computer aided design and drafting

Forensic Video Solutions - Edmonton, Alberta Canada Reverse Projection - On Site Instruction (August 10, 2015)

- practical Instruction on Traditional Reverse Projection
- · practical Instruction on 3D Laser Scanning

Forensic Video Solutions - Spokane, Washington USA ffmpeg- A Dynamic Forensic Video Workflow (February 23 - 27, 2015)

- specialized training utilizing the ffmpeg framework for multimedia evidence
- advanced level of training in the forensic video analysis workflow
- specialized training in utilizing the command line of the computer's operating system

Imaging Forensics - Anaheim, California USA Forensic Video Analysis with Adobe Photoshop (January 12-15, 2015)

- advanced level of training utilizing Adobe Photoshop techniques in the areas of still image clarification, frame averaging
- advanced level of training utilizing Photoshop techniques in the areas of video image clarification, editing, and correction of aspect ratio
- training provided in court presentation of video and still images

Page 8 of 16



International Association for Identification (IAI) 99th International Education Conference

August 2014 Minneapolis, Minnesota USA

Specialty Workshops Attended:

Introduction to Gait Analysis

Forensic Digital Image Processing Tips and Techniques using Adobe Photoshop

Law Enforcement and Emergency Services Video Association (LEVA) - Indianapolis, Indiana USA
Digital Multimedia Evidence (May 7-11, 2012)

Lab Assistant

Law Enforcement and Emergency Services Video Association (LEVA) Video Evidence Symposium and Training Conferences

November 2015 Clearwater Beach, Florida USA

Specialty Workshops Attended:

Software Instruction: Adobe Premiere Pro, Adobe Photoshop and AVID Media Composer

October 2014 Coeur d'Alene, Idaho USA

Specialty Workshops Attended:

Software Instruction: Adobe Premiere Pro, Adobe Muse, Adobe

Photoshop and AVID Media Composer

Photogrammetry and Reverse Projection

September 2013 Asheville, North Carolina USA

Specialty Workshops Attended:

DAC Audio

**Image Compression** 

Omnivore Software Specific Training

October 2012 San Diego, California USA

Specialty Workshops Attended:

Image Authentication

Software Instruction: Adobe Premiere Pro and

AVID Media Composer

October 2008 Orlando, Florida USA

October 2007 Calgary, Alberta Canada

Photoshop Techniques 2-day course

October 2006 San Francisco, California USA

Page 9 of 16



William Westfall, Gallagher-Westfall Group, Inc. - Minneapolis, Minnesota USA Leadership, Liability & Performance Management (October 3-4, 2007)

· learned strategies for leadership and supervisory skills in law enforcement

Law Enforcement and Emergency Services Video Association (LEVA) - Indianapolis, Indiana USA

Processing Digital Multimedia Evidence (May 7-11, 2007)

- advanced level of training in the processing of digital multimedia, compression schemes, forensic workflow and legal precedence
- · training in the best practices for the acquisition of digital multimedia evidence

Law Enforcement and Emergency Services Video Association (LEVA) - San Fransisco, California USA

Courtroom Testimony for Forensic Video Analysts (October 22-24, 2006)

 advanced level of training in courtroom testimony techniques which included a most court situation.

Law Enforcement and Emergency Services Video Association (LEVA) - Indianapolis, Indiana USA

Advanced Forensic Video Analysis and the Law (May 1-5, 2006)

- advanced level of training in forensic video technology as well as the science involved in the collection of analog and digital video evidence
- advanced level of training in the background of forensic video analysis in US and Canadian court systems
- trained in expert testimony in a moot court setting

British Columbia Institute of Technology (BCIT) - Vancouver, British Columbia Canada

Forensic Video Analysis: Photographic/Video Comparison (August 22-26, 2005)

- · trained in scientific methodology of identification
- gained experience analyzing, comparing, and evaluating video images and photographic evidence
- toured a garment manufacturing plant to demonstrate class vs. unique characteristics

Page 10 of 16



Northwestern University - Center for Public Safety - Minneapolis, Minnesota USA Shooting Incident Reconstruction & Officer-Involved Shootings (June 13-17, 2005)

specialized training in the reconstruction of a shooting crime scene

Ron Smith & Associates Incorporated - Minneapolis, Minnesota USA Courtroom Testimony Techniques (September 15-16, 2003)

· trained in courtroom techniques for the expert witness

Demystifying Palm Prints (September 17-19, 2003) - Minneapolis, Minnesota USA

- gained training in the analysis, comparison and evaluation of latent palm print evidence
- · gained experience in recognizing the location of latent palm print evidence

Ocean's Systems (March 2003) - Burtonsville, Maryland USA Vendor Specific Training using AVID Media Composer

Law Enforcement/Emergency Services Video Association (LEVA) - Quantico, Virginia USA

Basic Forensic Video Analysis and the Law (September 24-27, 2002)

- · gained basic training in forensic video analysis technologies
- · trained in US and Canadian case law pertaining to forensic video analysis

Northwestern University - Center for Public Safety - Minneapolis, Minnesota USA Investigative Photography Workshop (June 17-21, 2002)

· trained in crime scene and copy stand photography using 35 mm camera

Crime Scene Technology Workshop (**June 24-28, 2002**) - Minneapolis, Minnesota USA

 grained advanced training in various latent print enhancement techniques through chemical processes

MLI-OTP-0072-0044

Page 11 of 16

Federal Bureau of Investigation Training School - Minneapolis, Minnesota USA Fingerprint Pattern Recognition and Comparison (April 23-25, 2002)

IAI Conference: Mid-States Division Conference - Peoria, Illinois USA (March 25-29, 2002)

IAI Conference: Minnesota Division Fall Conference - Hinkley, Minnesota USA (October 19-21, 2001)

Ridgeology Consulting Services, David Ashbaugh - Minneapolis, Minnesota USA Forensic Ridgeology Course (September 24-28, 2001)

- gained advanced training in the analysis, comparison, and evaluation of ridges and pore structure of latent prints
- gained advanced training in the scientific process of comparison evidence

The Institute for Forensic Imaging - Minneapolis, Minnesota USA Crime Scene Photography (May 22-25, 2001)
Forensic Digital Imaging, Phase 1 (June 12-15, 2001)

- · trained in 35 mm still photography
- · trained in the application of Adobe Photoshop to still images

### EXPERT QUALIFICATIONS AND COURT TESTIMONY

I have been qualified as an expert witness in the following fields: crime scene analysis, latent print examination and forensic video analysis. I have given testimony, as well as testified as an expert witness many times, including the following cases:

R. v. Sandoval-Barillas Alberta Court of Queen's Bench

Justice A. McLeod Expert Witness in Forensic Video Analysis

(Comparison Analysis and Timeline Analysis)

January 11th, 2016

Page 12 of 16



#### R. v. Smith

Saskatchewan Court of Queen's Bench Justice C. Dawson Expert Witness in Forensic Video Analysis (Motion Tracking Analysis and Comparison Analysis) November 10th, 2015

#### R. v. Piche

Alberta Court of Queen's Bench Justice S. Brooker Expert Witness in Forensic Video Analysis (Comparison Analysis and Timeline Analysis) October 15th, 2015

### R. v. Apetrea

Alberta Court of Queen's Bench Justice E.C. Wilson Expert Witness in Forensic Video Analysis (Comparison Analysis, Compression, Infrared Cameras, Blooming) March 17 and 18, 2015

### Calgary Police Service - Professional Standards Section

Cst. Huitt Hearing Westwinds Campus Expert Witness in Forensic Video Analysis September 18th, 2013

### R. v. Jeha

Alberta Provincial Court Forensic Video Analysis Testimony February 13th, 2013

### State of Minnesota vs. Amani J. Fardan

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Crime Scene Processing and Latent Print Processing and Examination May 15<sup>th</sup>, 2008

Page 13 of 16



#### State of Minnesota vs. Antwon Williams

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Shooting Crime Scene Analysis and Latent Print Processing and Examination February 23rd, 2007

### State of Minnesota vs. David Grady

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Forensic Video Analysis November 15, 2006

### State of Minnesota vs. Chandan Prentiss Hurd

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Shooting Crime Scene Analysis and Latent Print Processing and Examination November 13, 2006

#### State of Minnesota vs. Prentis Cordell Jackson

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Homicide/Shooting Crime Scene Analysis October 31, 2006

### State of Minnesota vs. David William Allen

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Forensic Video Analysis June 20, 2006

### State of Minnesota vs. James Clinton Wren

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Video Image Comparison Examinations April 3, 2006

### State of Minnesota vs. Pierre Lamont Leake

State of Minnesota, County of Hennepin, District Court, Fourth Judicial District Expert Witness in Homicide/Stabbing Crime Scene Analysis September 2003

Page 14 of 16



### **IMAGE ANALYSIS PROJECTS**

### Jonathan Daniels, Civil Rights Activist

March on Washington Image April 2015

- · image analysis
- · facial and clothing comparison

### **TEACHING AND SPEAKING ENGAGEMENTS**

### LEVA Forensic Video Analysis and the Law, Level 2

Honolulu, Hawaii, USA September 2017

· Laboratory Instructor

#### LEVA Forensic Video Analysis and the Law, Level 1

Honolulu, Hawaii, USA February 2017

· Laboratory Instructor

### Lancaster House Labour and Arbitration Conference

Vancouver, British Columbia November 2015

· presented on the technical aspects of forensic video analysis

### Alberta Justice Crown Prosecutor's Office

Calgary, Alberta October 2015

· presented on the technical aspects of forensic video analysis

Page 15 of 16



### Saskatchewan Justice Public Prosecution Spring Conference

Regina, Saskatchewan May 2014

co-presented on the technical issues dealing with forensic video analysis
 Forensic Video Analysis: Overcoming challenges in leading and defending video evidence

### LEVA: Digital Multimedia Evidence Processing

Indianapolis, Indiana May 2012

Laboratory Instructor

### Minneapolis Community and Technical College

Minneapolis, Minnesota Spring Semester 2007

taught booking procedures, crime scene processing and fingerprinting techniques

### LEVA: Basic Forensic Video Analysis and the Law

Indianapolis, Indiana July 2006, February and Sept 2007

· Laboratory Instructor

### Hamline University, St Paul, Minnesota

Saint Paul, Minnesota May 2002 – 2006

· presented crime scene investigation techniques through case studies

### Metropolitan State University, Minneapolis Minnesota

Minneapolis, Minnesota October 2002 -2006

· presented crime scene investigation techniques through case studies

Page 16 of 16

