William R. Henningsen

CONTACT:

William.Henningsen@cityofoma

Phone: 402-658-4672

Curriculum Vitae

Currently Held Positions:

Head of High Definition Survey (HDS) Consulting, Collision & Crime Forensic Solutions (Forensic Mapper, Trainer, and Consultant)

Forensic Manager Omaha Police Department (Unit Director and Expert 3D Forensic Analyst)

Summary of Qualifications

- Top Management Officer for ISO 17020 Accredited Forensic Unit since 2017 (Crime Scene, Forensic Photography, Forensic Mapping, Reconstruction, Latent Print Examination)
- Certified Laser Scanner Operator (IAFSM 2020)
- Certified Leica Geosystems Public Safety Laser Scanner Operator (2018)
- Certified Forensic Video Technician (LEVA 2011, 2014, 2017, 2020)
- Certified Instructor, Nebraska Law Enforcement Training Center
- Certified Crime Scene Analyst by International Association for Identification (IAI – 2001, 2006)
- Possess extensive training and experience collecting, processing, and clarifying Digital Multimedia Evidence (Digital Images, Video Analysis, Latent Fingerprints, Courtroom Presentations, Crime Scene Mapping, 3D Laser Scanning, GPS Mapping, Total Station Mapping)
- 25 years of experience in Omaha Police Forensic Investigations Unit
- Recipient of OPD Distinguished Service Medal: 2018
- OPD Ribbon of Excellence recipient Five (5) awards
- Trained by Certified Latent Fingerprint Examiners (IAI)
- Trained by Certified Firearms Examiner (AFTE-IAI)
- Trained by Certified Forensic Photographer (IAI)
- Letters of Recognition from: Senator Ben Nelson, Governor of Nebaska, Mayor of Omaha, Omaha Police Chief, US Attorney (Omaha), Deputy Chief – Omaha Police Dept., OPD Detective Bureau, OPD Crime Lab Manager, OPD Crime Lab Criminalist, Douglas County Attorney and Deputy County Attorneys (Douglas County, NE)

Membership in Professional Associations

- International Association for Identification (IAI)
- DOJ / NIJ Terrestrial Laser Scanning Working Group
- International Association of Forensic and Security Metrology Current Board Member (IAFSM)
- IAFSM Educational Committee Chair

- International Association of Forensic and Security Metrology Chair of Training Committee
- Law Enforcement and Emergency Services Video Association (LEVA)
- Nebraska Chapter International Association for Identification (NEIAI)
- Past Board Member for Nebraska State Chapter IAI
- Past Editor for Nebraska State Chapter IAI

Education and Experience

- Over 500 hours of formal training in Forensic Interpretation of Digital Images and Video
- Over 500 hours of formal training and instruction in Forensic Metrology and 3D Scanning
- Over 500 hours of formal training in various aspects of Crime Scene Investigation and Documentation
- Successful Proficiency Tests in Latent Print Examination 15 times between 2003 and 2022.
- Instructor for Longmont Police Department CO Forensic Mapping with Leica RTC360 and REGISTER 360 – 32 hours (February 2023 – 10 Students)
- Criminal Justice Information Services (CJIS) Security Awareness Training
 4 hours online training (January 2023)
- Instructor for Kane County Sheriff IL Forensic Mapping with Leica BLK2GO SLAM Lidar – 8 hours (December 2022)
- Instructor for Iowa Division of the IAI Annual Educational Conference Shooting Reconstruction with Laser Scanners – 4 hours – Des Moines, IA: November 2022
- Instructor / Student for Forensic Anthropology Buried Body Recovery Training – 8 hours – Omaha, NE (Dr. Brittany S. Walter, October 2022)
- IATAI Conference, Collinsville IL Sept 21-23, 2022
- 106th International Association for Identification (IAI) Educational Conference, Omaha, NE – 7 Day Conference – Crime scene, video analysis, forensic mapping, accreditation and training protocols (July / August 2022)
- Instructor for 2022 IAI International Conference Workshop W116 How to Use 3D Metrology from Laser Scanners to Reconstruct Bullet Trajectory – 4 hours – Omaha, NE (20 Students - August 2022)
- Instructor for 2022 IAI International Conference Workshop W123 Camera Match Overlay 2D Images to 3D Point Clouds – 4 hours – Omaha, NE (20 Students - August 2022)
- Instructor for 2022 IAI International Conference Workshop W171 Capturing Usable 3D Data from Mobile Devices and SLR Images – 4 hours – Omaha, NE (20 Students - August 2022)
- Lecturer for 2022 IAI International Conference Best Practices for Documenting a Crime Scene with a Laser Scanner – 1 hour Omaha, NE (August 2022)
- Instructor for Douglas County Sheriff NE Forensic Mapping with Leica BLK360 G1 – (10 hours – 5 students July 2022)
- Instructor for Deschutes County Sheriff OR Forensic Mapping with Leica GS18T GNSS / GPS system – (5 Students – May 2022)

- REACT Peer Support Training from University of Central Florida 8 hours online training – peer support techniques and awareness training (May 2022)
- Attendee and Lecturer for Illinois Division of the IAI Annual Educational Conference (Photogrammetry theory and best practices for Forensic Mapping), April 2022
- Instructor for South Dakota Highway Patrol SD Forensic Mapping with Leica RTC360 and REGISTER 360 – (12 Students – April 2022), Rapid City, SD
- Instructor for Council Bluffs Police Department IA Forensic Mapping with Leica RTC360 (8 Students – 8 hours), March 2022
- Omaha Police Department sUAS Visual Observer Training 2 hours Omaha, NE (March 2022)
- Instructor for Kane County Sheriff IL Forensic Mapping with Leica GS07 and Infinity Aerial Photogrammetry (February 2022 - 10 Students)
- Instructor for IAFSM Basic Laser Scanner Certification Course IAFSM / ASCR Joint Conference 2022 – 12 hours (February 2022 – 40 Students)
- Instructor for Deschutes County Sheriff OR Forensic Mapping with RTC360 and REGISTER 360 – 8 hours (January 2022 – 10 Students)
- Instructor for Bend Police Department OR Forensic Mapping with RTC360 and REGISTER 360 – 32 hours (October 2021 – 10 Students)
- Primer Gunshot Residue Testing Training Collection and theoretical considerations – 2 hours – Omaha, NE (May 2021)
- Law Enforcement & Emergency Services Video Association (LEVA) 2020
 Digital Multimedia Evidence International Training Symposium Software, theory, and workflow training 49 hours Virtual COVID seminar
- FFMPEG for Forensic Video Examinations 8 hours Webinar with practical exercises and final exam (FFMPEG use for interrogating, analyzing and visualization of forensic video evidence): June 2020
- Instructor for Forensic Mapping in COVID-19 Environments 2 hours Webinar (COVID-19 Safety and Best Practices Adaptations to 3D Mapping in Infectious Environments – 97 Attendees)
- Instructor for Omaha Police Department Laser Scan Team 40 Hours (Utilization of Leica ScanStation P50 laser scanner, utilization of Leica BLK360 laser scanner, utilization of Leica Cyclone Register360 point cloud processing software), Omaha, NE: March 2020
- Department of Justice / National Institute of Justice Terrestrial Laser Scanner Working Group (Beginning in March 2020) In person and online meetings ongoing.
- Workshop Coordinator IAFSM Annual International Conference 12 hours (3D documentation of Blood Pattern and Crash Investigations), Nashville, TN: February 2020
- Guest Speaker IAFSM Annual International Conference 3 hours (Best Practices for Forensic Laser Scanning), Nashville, TN: February 2020
- IAFSM Basic Laser Scanner Operator Certification 16 Hours (Certification in the technology of 3D Laser Scanner operation), Nashville, TN: February 2020
- IAFSM Annual International Conference 28 Hours (Best practices for forensic mapping, case studies, 3D forensic analyses to include shooting reconstruction, height and positional analysis, blood pattern area of origin analysis), Nashville, TN: February 2020

- Shooting Incident Reconstruction 40 Hours Jonathyn Priest (Theory, practical exercises and examination), Omaha, NE: December 2019
- FBI Law Enforcement Instructor Development Training 40 hours (Instructional techniques and curriculum development practical and demonstrative examinations), Omaha, NE: November 2019
- Forensic Video and Audio Training from Salient Sciences 35 hours (Video and audio fundamentals, multimedia file formats, video and audio capture, video clarification, audio clarification, editing exhibit preparation with VideoFOCUS Pro and CARDINAL MiniLabSuite), Omaha, NE: September 2019
- Nebraska Chapter International Association for Identification (NEIAI)
 Annual Educational Training Conference 16 hours, Ashland, NE: April 2019
- Bloodstain Pattern Analysis Utilizing FARO Zone 3D 4 hours Brenda Butler (FARO), Ashland, NE: April 2019
- Instructor for Omaha Police Department Laser Scan Team 16 Hours (Utilization of Leica ScanStation P50 laser scanner, utilization of Leica BLK360 laser scanner, utilization of Leica Cyclone Register360 point cloud processing software), Omaha, NE: March 2018
- Instructor for Omaha Police Department Laser Scan Team 16 Hours (Utilization of Leica ScanStation P50 laser scanner, utilization of Leica BLK360 laser scanner, utilization of Leica Cyclone Register360 point cloud processing software), Omaha, NE: February 2018
- Instructor for Texas Rangers 40 Hours (Processing Crime Scene Laser Scan Point Cloud data and CAD with Leica IMS Map360), San Antonio, TX: November 2017
- Instructor for Bend, OR Police Department 40 Hours (Forensic Mapping with Leica ScanStation C10, DotProduct DPI-8X handheld 3D scanner, Processing Point Cloud Data with Leica Cyclone software, Leica IMS Map360 CAD software), Bend, OR: August 2017
- Instructor for Oglala Sioux Tribal Police 40 Hours (Forensic Mapping with Leica MS60 Multistation, Processing Point Cloud Data and CAD with Leica IMS Map360), Pine Ridge, SD: July 2017
- Instructor for Council Bluffs, IA Police Department 40 Hours (Forensic Mapping with Leica ScanStation C10, Leica BLK360, Processing point Cloud Data with Leica Cyclone software, Leica IMS Map360 CAD software), Council Bluffs, IA: May 2017
- Latent Print Comparison Proficiency Test: March 2017
- Ocean Systems FVA101 32 Hours (Forensic video workflow in Omnivore, dTective, and ClearID software tools): September 2016
- ISO / IEC 17020 and Audit Preparation for Forensic Police Agencies 16
 Hrs. (Frank Fitzpatrick of ANAB 17020 Standard Training and Audit techniques)
- Leica HDS Forensic Laser Scanning Proficiency Course and Test 8 Hours (Manufacturer's training on basic competency with proficiency test in scanning, NIST validation, data processing and exhibit delivery)

- Speaker, presenter, and panel discussion participant at SPAR 3D Expo and Educational Conference – <u>3D Documentation for Forensics, Law Enforcement and Emergency Response</u>, and <u>Integrating Disparate / Multi-Modal Data</u> – Houston, TX: April 2016
- SPAR 3D Expo and Educational Conference 24 hrs. (Numerous presenters and trainers / 3D scanning, forensic metrology best practices, developing 3D technology, vendor specific training for Leica and DotProduct, hands-on workshops), Houston, TX: April 2016
- Speaker and presenter at 32nd Annual Nebraska IAI Educational Conference – <u>Laser Scanning and 3D Crime Scene Documentation</u> – 8 hrs., Mahoney State Park, Ashland, NE: April 2016
- Latent Print Proficiency Test: March 2016
- Recertified as a Law Enforcement Academy Instructor: April 2015
- Latent Print Comparison Proficiency Test: March 2015
- Nebraska State Patrol Crime Lab and Nebraska Attorney General, DNA Evidence Workshop – 8 hours, Omaha, NE (Jason Linder NSP): February 2015
- Collision Forensic Solutions & JSA Forensic Mapping, Leica ScanStation / Leica Cyclone / MapScenes Forensic Cad (Advanced topics in 3D documentation for Crime Scene Documentation and Photogrammetry) – 40 hrs., Rapid City, SD(Joel Salinas): December 2014
- Collision Forensic Solutions Leica C10 Laser Scanning, Leica Cyclone Software and MapScenes PointCloud – 80 Hours. (Beginning topics in 3D documentation of crime scenes and point cloud data processing): January 2014.
- Forensic Technology Center of Excellence, Understanding Basic Statistical Concepts: Fingerprints 1 hr. (Michelle Triplett): 2014
- Speaker and presenter at IAFSM Annual Educational Conference -Omaha Police Crime Laboratory's First Year of Laser Scanning:
 Developing an efficient, relevant and validated workflow for HDS laser scanning of crime scenes - Orlando, FL: November 2014
- International Association of Forensic and Security Metrology (IAFSM), Annual Educational Conference – 24 hrs. (Numerous presenters / 3D scanning, vehicle accident simulation, photogrammetry, metrology best practices), Orlando, FL: November 2014
- Leica Geosystems, Common (and not so Common) Questions about Cyclone 9.0 Software – 1 hr. (Mike Harvey, Bill Wallace – Leica Geosystems): 2014
- Leica Geosystems, A New Approach to Point Cloud Registration / Cyclone 9.0 Software – 1 hr. (Mike Harvey, Guy Cutting – Leica Geosystems): 2014
- Re-Certified LEVA Forensic Video Technician: 01 July 2014
- Leica Geosystems, GPS / GNSS Crime Scene Mapping and Orientation
 24 hrs., Omaha Public Safety Training Center & OPD Central Headquarters (Duke Dutch of Leica Geosystems): 2014
- Law Enforcement and Emergency Services Video Association (LEVA), Photographic and Video Comparison 40 hrs., University of Indianapolis (Grand Fredericks): 2014

- Collision Forensic Services & JSA Forensic Mapping, Leica ScanStation / Leica Cyclone / MapScenes Forensic Cad for Crime Scene Documentation and Photogrammetry – 40 hrs., Public Safety Training Center (Joel Salinas): 2014
- Latent Print Comparison Proficiency Test: November 2013
- Collision Forensic Services & JSA Forensic Mapping, Leica ScanStation C10 Operation for Crime Scene Documentation and Photogrammetry – 40 hrs., Public Safety Training Center (Joel Salinas): 2013
- Law Enforcement and Emergency Services Video Association (LEVA), Annual International Training Conference – 40 hrs., - Various Topics (Adobe software training, DME Field Acquisition, Video and Image Compression, Examinations of Compressed Images, Evaluation of Free and Open Source Software Tools, Digital Video Processing / Analysis, Case Studies, DVR Evidence Recovery, Byte Level Analysis of DVR's, Signal Frequency and Mathematics), Asheville, NC (Gerald Lanna, Jason Latham, James Schoerring, and others): 2013
- Nebraska IAI, Shoe Print and Tire Tread Impressions Workshop 3 hrs., Mahoney State Park (Kent and Amy Weber): 2013
- NE IAI Conference, 8 hrs.: 2013
- Collision Forensic Services / MapScenes / Leica Geosystems, Mapping for Forensic Scene Investigators – 80 hrs. (Michael Selves): 2012
- Latent Print Comparison Proficiency Test: July 2012
- NE IAI Conference, 16 hrs. : 2012
- Certified Instructor for the Nebraska Law Enforcement Training Center: 2011
- Latent Print Comparison Proficiency Test: October 2011
- Certified as LEVA Forensic Video Technician: 01 June 2011
- Law Enforcement and Emergency Services Video Association (LEVA), Level 3: Advanced Forensic Video Analysis and the Law — 40 hrs., University of Indianapolis (Grant Fredericks, Jonathan Hak): 2011
- FBI, Large Vehicle Bomb Post Blast Scene Investigation 40 hrs. (20 hrs. metrology / documentation), Scottsbluff, NE (Kevin MILES FBI)
- Law Enforcement and Emergency Services Video Association (LEVA), Processing Digital Multimedia Evidence – 40 hrs., University of Indianapolis (Grant Fredericks, Dean Brown): 2010
- Ethics in Forensic Science 32 hrs., West Virginia University (Robin Bowen): 2010
- Latent Print Comparison Certification Preparation Workshop 8 hrs., Lincoln Police Department (Patrick Wertheim): 2010
- NE IAI Conference, 8 hrs. : 2010
- Law Enforcement and Emergency Services Video Association (LEVA),
 Processing Digital Multimedia Evidence 40 hrs., University of Indianapolis (Grant Fredericks, Dean Brown): 2010
- The Basics of Biological Evidence 9 hrs., West Virginia University (Jess Boyle): 2010
- Latent Print Comparison Proficiency Test: December 2009
- Law Enforcement and Emergency Services Video Association (LEVA), Photographic and Video Comparison 45 hrs., University of Indianapolis (Grant Fredericks): 2009

- Leica Total Station, MapScenes Evidence Recorder, MapScenes Forensic CAD Pro, - 80 hrs., Yankton Police Department, Yankton SD (Collision Forensic Solutions – Michael Selves): Feb/March 2009
- Adobe Photoshop for Forensic Video Analysts 32 hrs., Sponsored by BNSF Police – Resolution Video (Casey Caudle, Target Corp. / George Reis, Imaging Forensics): 2007
- NE IAI Conference, 16 hrs.: 2007
- Midwest Forensic Resource Center, Advanced Forensic Digital Imaging Focus on Fingerprint Analysis and Imaging (David Witzke), 40 hrs.: 2007
- Law Enforcement and Emergency Services Video Association (LEVA),
 Basic Video Analysis and the Law (Grant Fredericks), 40 hrs.: 2007
- NE IAI Conference, Digital Forensic Applications, Forensic Video Analysis User's Group, Fingerprint and Palm Print Comparison (Proficiency Testing): 2006
- IAI Crime Scene Analyst Recertification: 2006
- Cognitech Forensic Video Analysis User Certification: 2005
- NE IAI Conference, Secret Service Counterfeiting Seminar, Critical Thinking for Forensic Investigators, Latent Fingerprint Comparison (Proficiency Testing) 8 hrs.: 2005
- Crime and Death Scene Reconstruction Utilizing Bloodstain Pattern Analyis (Paul Erwin KISH, Dr. Michael BADEN), 16 hrs.: 2004
- RUVIS Light Source Latent Fingerprint Development (Randy Schiefer, Spex Forensics) 8 hrs.: 2004
- NE IAI Conference, RUVIS Technology, ATF Seminar, Latent Fingerprint / Palm Print Comparison (Training and Proficiency Testing) 8 hrs.: 2004
- FBI Digital Imaging of Evidentiary Photography emphasis on digital images and evidentiary fingerprint photography (David Witzke, Foray Technologies / Robert May, FBI Crime Lab): 2003
- FBI Fingerprint Expert Witness Seminar, 40 hrs.: 2003
- NE IAI Conference, General Crime Scene Investigation, Fingerprint and Palm Print Comparison (Proficiency Testing) (8 hrs.): 2003
- Department of Justice (DOJ) Firearms Tracing and Armed Gunmen: 2003
- Department of Justice (DOJ) DNA Evidence Advanced: 2003
- BATF / IBIS Advanced Training: 2002
- FBI Daubert Fingerprint Presentation: 2002
- NE IAI Conference, Forensic Alternate Light Applications (16 hrs.): 2002
- Department of Justice (DOJ) DNA Evidence Basic: 2001
- Adobe Photoshop Class / Experian Training: 2001
- IAI Crime Scene Analyst: 2001
- Nebraska State Patrol Advanced Forensic Diagram Training (16 hrs.): 2000
- Nebraska State Patrol Basic Forensic Diagram Training (16 hrs.): 2000
- NE IAI Conference, Blood Pattern Analysis, Digital Forensics, Methamphetamine Labs, Forensic DNA: 2000
- POAN Crime Scene Evidence Collection (40 hrs.): 2000
- NE IAI Conference, Mass Disaster Scenes (16 hrs.): 1999
- Bomb Scene Recognition (8 hrs.): 1999
- Verbal Judo: 1999

- FBI Basic Fingerprint School (40 hrs.): 1998
- BATF Serial Number Restoration (32 hrs.): 1998
- BATF / IBIS Training: 1997
- Promotion to Crime Lab Technician: 1997
- NE IAI Conference: 1997
- Class B Permit Certification (Breath Analysis), Intoxilyzer 5000: 1996
- Basic Criminalistics Science (Omaha Police Department): 1996
- OPD Crime Lab Apprenticeship (1 year): 1996
- University of Nebraska Omaha (Biology studies)
- Creighton University (Bachelor Degree)