



## **LAURENCE R. PENN, CFVT**

Senior Forensic Animation / Video Specialist & Visual Effects Creative Director

### **EDUCATION**

#### **Maryland Institute College of Art (MICA)**

Bachelor of Fine Arts (BFA) in Illustration; Spring 2001, GPA: 3.6

Concentration in Digital Multimedia and 3D Animation

National Art Honors Society Scholarship

MICA Presidential Award, Illustration Departmental Award, MICA Achievement Award

### **PROFESSIONAL EXPERIENCE**

- 2016 – Present **Senior Forensic Animation / Video Specialist – DJS Associates Inc., Abington, PA**  
Assists with engineering computer animations through processing scan data, modeling, texturing, animating, and compositing the final rendered deliverables. Performs digital video forensic analysis for authenticity and tampering, as well as camera and object motion tracking for 3D scene reconstructions. Automates and optimizes workflows and creates interactive demonstrative tools with script programming.
- MIMICS (Microcomputer Image Modeling Interface and Capture System), 2021**  
Custom-built and scripted multi-camera array with over 50 Raspberry Pi cameras for photogrammetry scanning of people and objects for use in 3D animations and accident reconstructions.
- Interactive, 3D Simulation App Prototype, 2018**  
Programmed for lifeguard training using the Unity Game Engine platform in collaboration with Aquatic Safety Research Group.
- 2020 – Present **Visual Effects (VFX) Creative Director – Theorem 3D, Abington, PA**  
Coordinates and supervises teams and technology for on-set visual effects production, reality capture, previsualization, camera match moving, 3D animation and compositing for film, episodic television, and advertising.
- 2022 **The Rainbow Prince Project, Laura Napier and Doug Claybourne**  
Visual Effects Creative Director for 30-minute short film managing in-house and external team including award-winning Stereo-D Hollywood VFX powerhouse for production of over 70 VFX shots. 3D animation, camera match moving, and compositing for over 20 VFX shots.
- 2003 – 2016 **Dynamic Digital Advertising, LLC., Willow Grove, PA**  
Senior 3D/2D Animator, Editor and Senior Flash Programmer
- Philips Healthcare:** Heart Navigator eLearning app development, front-end programming, user interface design, 3D modeling and animation.

**The Medical University of South Carolina:** Modified Barium Swallowing Impairment Profile (MBSIMP) eLearning platform development and front-end programming, anatomical 3D modeling and 3D animation.

**Warner Brothers, L'Oréal, Hot Topic:** Interactive CD-ROMs & DVDs including movie "300" behind-the-scenes DVD.

**ETHOS Health Communications:** Ethos Engage multiuser LAN Peer-to-Peer interactive presentation app development and front-end programming.

- 2016 **Dionysus Productions, LLC., Philadelphia, PA**  
Star Wars - Precious Cargo (Fan Film): 45-second 3D animation dogfight, Spaceship 3D modeling & live-action compositing, Lightsaber VFX for 30-second fight with 3 actors & 4 light sabers, hologram VFX and compositing.
- 2016 **Iron Horse Cinema, PA/NJ**  
Promo - (League of Legends theme): 3D modeling & animation of "Vi" Gauntlets for live-action compositing.
- 2016 **John Hutelmyer, Philadelphia, PA**  
The Kenn Kweder Documentary: VFX compositing of posters into multiple live-action shots.
- 2015 **PopKitchen Co., Providence, RI**  
Teknor Apex: Hose coupling system video including 3D modeling and animation with multiple-pass rendering.
- 2015 **Kid Laser and the Dynamite Deal, Sitka, AK**  
Machines and Monsters: Album cover and album release poster illustration.
- 2014 **Pretty Damn Sweet, Philadelphia, PA**  
Railroad Earth: VFX compositing of multiple shots for "Chasin' a Rainbow" music video.
- 2013 **Midnight Crew Studios, Baltimore, MD**  
Call Girl of Cthulhu: VFX compositing for multiple shots.
- 2013 **Junk Cinema Productions, Philadelphia, PA**  
Illustrated anthropologist's sketchbook for the indie movie "Leech Brain".

## **CONTINUING EDUCATION**

### **Lightpoint Learning**

Photogrammetry for Collision Reconstruction; 5/8/2026

Camera Calibration, PhotoModeler Software, Vehicle Crush Depth and Speed Analysis, Accuracy and Reporting

### **CyArk**

Photogrammetry Processing and Modeling; 3/17/2025

Sensor Fusion, Imagery Pre-processing, Advanced Image Alignment with Reality Capture, Generating and Optimizing 3D Meshes, Mesh Texturing and UV Unwrapping

Terrestrial Photogrammetry Data Capture; 1/31/2025

Photography Techniques for Terrestrial Photogrammetry, Field Scoping and Documentation, Data Management and Pre-Processing, Small-Object Photogrammetry

## **Udemy**

Unreal Engine VR Development Fundamentals; 8/25/2023  
Introduction to Blueprints, VR Development Basics

## **AccuPixel Ltd.**

Metashape Professional Edition for Forensics & Surveying; 11/7/2023  
Optimization, Working with DEMs and Orthomosaics, Metashape and Drones  
Metashape Foundation Course for Forensics & Surveying; 8/21/2023  
Fundamentals of Photogrammetry, Metashape Workflows

## **Law Enforcement and Emergency Services Video Association International, Inc. (LEVA)**

Courtroom Testimony for Expert Witnesses; 6/1/2026 – 6/3/2026  
Drafting Expert Reports, Expert Witness Bias, Trial Preparation, Moot Court  
An In-Depth Examination of Video Analysis Processes; 11/18/2025 – 11/20/2025  
Advanced Examination of Frame-level Video Metadata, ADAPT Software, Producing Accurate Observations/Calculations  
Level 4: Advanced Forensic Video Analysis & the Law; 5/1/2023 – 5/5/2023  
Advanced Forensic Video Analysis Techniques, Practical Exam, Written Exam, Moot Court  
Level 3: The Principles of Video/Image Compare and Contrast; 1/24/2022 – 1/28/2022  
Scientific Method ACE-VR, Bias and the Implications, Forensic Comparative Analysis, and the Law  
Level 2: Digital Multimedia Evidence Processing; 7/12/2020 – 7/16/2021  
Principles of CCTV Systems, Data Authentication and Integrity Verification, DME Acquisition and Processing Best Practices, Legal Issues with Digital Video, Audio Theory  
Level 1: Forensic Video Analysis and the Law; 3/22/2021 – 3/26/2021  
Digital Multimedia Evidence (DME) Fundamentals, Video Compression Theory, Proper Recovery of DME

## **The Pixel Farm PFAcademy PFTrack Software Proficiency Certification**

PFTrack Core Course 300; 8/17/2022; PFTA300-000038  
PFTrack Core Course 200; 7/13/2022; PFTA200-000054  
PFTrack Core Course 100; 2/8/2022; PFTA100-000218

## **Certified Forensic Video Technician (CFVT): 7/16/2021 – Present**

Member Since 9/5/2019

## **eForensics Magazine: Digital Video Forensics (W28); 11/15/2018**

Certificate: 56371436564922  
Video Evidence Concepts and Principles, Video Analysis, Content Authentication, Tamper Detection

## **FXPHD: Visual Effects (VFX) Training**

Certificate: FUE2CU5MERH25VDK  
Digital Video Fundamentals, Chroma Key Compositing  
VFX Foundations I (VFX201; 10/2012)  
Python Scripting for Compositors (PYT101; 10/2012)  
Intermediate Nuke (NUK204; VFX Compositing Software; 7/2012)  
Introduction to Nuke (NUK103; VFX Compositing Software; 6/2012)

## SKILLS / SOFTWARE

- Amped FIVE, Amped Authenticate: Forensic Video Processing and Analysis
- The Pixel Farm PFTrack: Reverse Projection Photogrammetry Analysis/Camera Match Moving
- Leica Cyclone, Leica Register360, Faro Scene: 3D Point Cloud Scan Processing
- Agisoft Metashape Professional, Jawset Postshot: Photogrammetry and Gaussian Splat 3D Modeling and Visualization
- Adobe Creative Cloud
  - AfterEffects: Forensic Video Analysis, Keying, Expressions, Camera Tracking, Particle Systems, Multiple-pass Compositing
  - Audition: Digital Audio Processing and Noise Reduction
  - Photoshop, Illustrator, Premiere: Image and Video Editing
- Autodesk 3DS Max, Chaos Group V-Ray and Phoenix FD, TyFlow: 3D Modeling, 3D Animation, Physically Based Rendering, Particle Physics
- Unreal Game Engine, Unity Game Engine: Interactive and Virtual Reality Visualization
- Imagineer Systems - Mocha: Tracking, Roto and Camera Match Moving
- Nuke: Multiple-Pass Compositing, Rig Removal, Tracking
- Proficient in Python Scripting
- Proficient in French

## PRESENTATIONS

“Decoding Digital Media Evidence in Accident & Injury Claims,” Webinar, Abington, PA, June 2026

“Engineering Analysis of Surveillance Data,” New Jersey Association for Justice (NJAJ) 2026 Boardwalk Seminar, Atlantic City, NJ, April 2026

“Accuracy in Engineering Animations,” New Jersey State Bar Association (NJSBA) Virtual Fall Conference, Webinar, Abington, PA, November 2025

“Accuracy in Engineering Animations,” Webinar, Abington, PA, January 2024

“Maximizing the Potential of Video Evidence,” Pennsylvania Bar Institute (PBI) Forensics in Capital Cases, Webinar, Abington, PA, December 2023

“Surveillance & Videogrammetry Analysis for Collision Reconstruction,” National Association of Subrogation Professionals (NASP) Annual Conference, Washington, D.C., October 2019

“The Forensic Engineering Analysis of Surveillance Video: A Real-World Example,” 6<sup>th</sup> Annual Claims Symposium, Harrisburg, PA, May 2019

“How New Technology Allows you to Evaluate your Case in Three Dimensions,” New Jersey Association for Justice (NJAJ) Boardwalk Seminar, Atlantic City, NJ, May 2019

“The Investigation of a Vehicle Collision: An Interactive Seminar Where YOU Take Part in the Investigation,” Forensic Storage & Technology Center, Southampton, PA, May 2019

“LIDAR and Photogrammetry: Comprehensive Data Collection for Historical Preservation,” AEC Next and SPAR 3D Expo and Conference, Anaheim, CA, June 2018

“Lunch and Learn: Video and 3D Analysis,” DJS Associates, Inc., Abington, PA, May 2018