



PRESENTS:
ADVANCED DIGITAL IMAGING
LIVE, ONLINE!

Foray Technologies is proud to announce its **advanced, three-day**, hands-on training program in forensic digital imaging **July 25 – 27, 2023**. This class will be **delivered LIVE, ONLINE**.¹

During this **advanced, three-day** course, participants will develop a comprehensive understanding of digital imaging concepts and technologies, and will be able to choose, perform and explain advanced Adobe® Photoshop® processing techniques and functionalities. In addition, participants will acquire expertise and knowledge of advanced digital imaging processes, using tools such as calculations and suppressing background patterns using Fast Fourier Transform filters and will learn how to apply these techniques to aid in the **forensic investigative process**.

Throughout this **LIVE, online** training program, participants will focus on best practices for **advanced digital imaging** processes for enhancing digital photographs, creating overlays, completing ACE-V documentation and more. The participants will be required to complete a number of practical exercises to demonstrate their knowledge and their ability to use these advanced tools and techniques. For example, participants will scale (calibrate) a variety of digital images for accurate, life-size output as well as choose the appropriate procedures for enhancing various types of evidentiary images to optimize image quality and contrast.

Participants are encouraged to practice these concepts, tips, and techniques using their own images (TIF or camera RAW format). They can document, interpret, and explain their image analysis process as well as describe the best practices for digital imaging concepts.

With more than 30 years of AFIS and forensic digital imaging experience, David Witzke (AKA Ski), is considered one of the foremost experts in forensic digital imaging technologies. Ski is an associate member of the International Association for Identification (IAI), the European and several regional divisions of the IAI; the Canadian Identification Society (CIS); and the European Network of Forensic Science Institutes Fingerprint Working Group (ENFSI FWG), where he has also been elected to serve on the ENFSI FWG Steering Committee; and Ski is the chairperson for the Digital Evidence Subcommittee for the IAI.

Ski is a contributing writer for three well-known forensic books: *Crime Scene Photography* (Third Edition, published 2016 by Academic Press), *Introduction to Crime Scene Photography* (Published 2012 by Academic Press) and *Footwear, The Missed Evidence* (Third Edition, published 2013 by Staggs Publishing). (*Crime Scene Photography* has been chosen by the IAI certification committees for the Certified Crime Scene Investigator (CCSI) Certification Test, the Certified Crime Scene Analyst (CCSA) Certification Test, the Certified Senior Crime Scene Analyst (CSCSA) Certification Test, and the Forensic Photography Certification Test.)

¹ Participants must attend all three days of training. It is also recommended that each person attending this program have at least a basic understanding of the Microsoft Windows 7 or 10 operating system. In addition, participants should, at a minimum, have a basic familiarity with Adobe Photoshop.

Computers must meet these minimum, Microsoft Windows requirements:

Processor: Intel® or AMD processor with 64-bit support*; 2 GHz or faster processor (NOTE: faster processor speeds provide support for a number of functions, including Camera RAW processing, Calculations, Pattern Removal Filter, etc.)

Operating system: Microsoft Windows 10*** October 2018 update (64-bit) version 1809 or later

RAM: 8 GB or more of RAM (NOTE: Adobe Photoshop CC 2020 is a RAM-intensive application. More is better!)

Graphics card: nVidia GeForce GTX 1050 or equivalent; nVidia GeForce GTX 1660 or Quadro T1000 is recommended (NOTE: Please be advised that any other video card creates problems such as resampling, aliasing, etc.)

Hard disk space: 3.1 GB or more of available hard-disk space for 64-bit installation; additional free space required during installation (NOTE: You cannot install Adobe Photoshop CC 2020 on a drive that uses a case-sensitive file system!)

Monitor resolution: 1280 x 800 display (OR HIGHER) at 100% UI scaling with 16-bit color and 2 GB or more of dedicated VRAM

OpenGL: OpenGL 2.0-capable system

Internet: An Internet connection and registration are necessary for required software activation, validation of subscriptions, and access to online services.

- Laptops must have an external mouse (Using the laptop touchpad is totally and completely unacceptable).
- Each user must have internet access and must run Zoom on their computer. (This allows the instructor to assist the user during hands-on exercises.)
- Each user must have access to and create a free account on WeTransfer.com. This requirement allows participants to transfer non-compressed versions of the images created during hands-on exercises; the file size for a majority of these images exceeds the capacity of most email systems. ***NOTE: Users must have access to WeTransfer.com at least one week prior to the start of class as well as during the class.***
- Each user must have an individual webcam with a microphone, and each laptop must be equipped with speakers. Alternatively, users may find it advantageous to use a headset that includes a microphone instead of using the microphone on the webcam and using the laptop speakers. Using a headset that includes a microphone also eliminates a lot of problems caused by speaker (sound) "feedback".