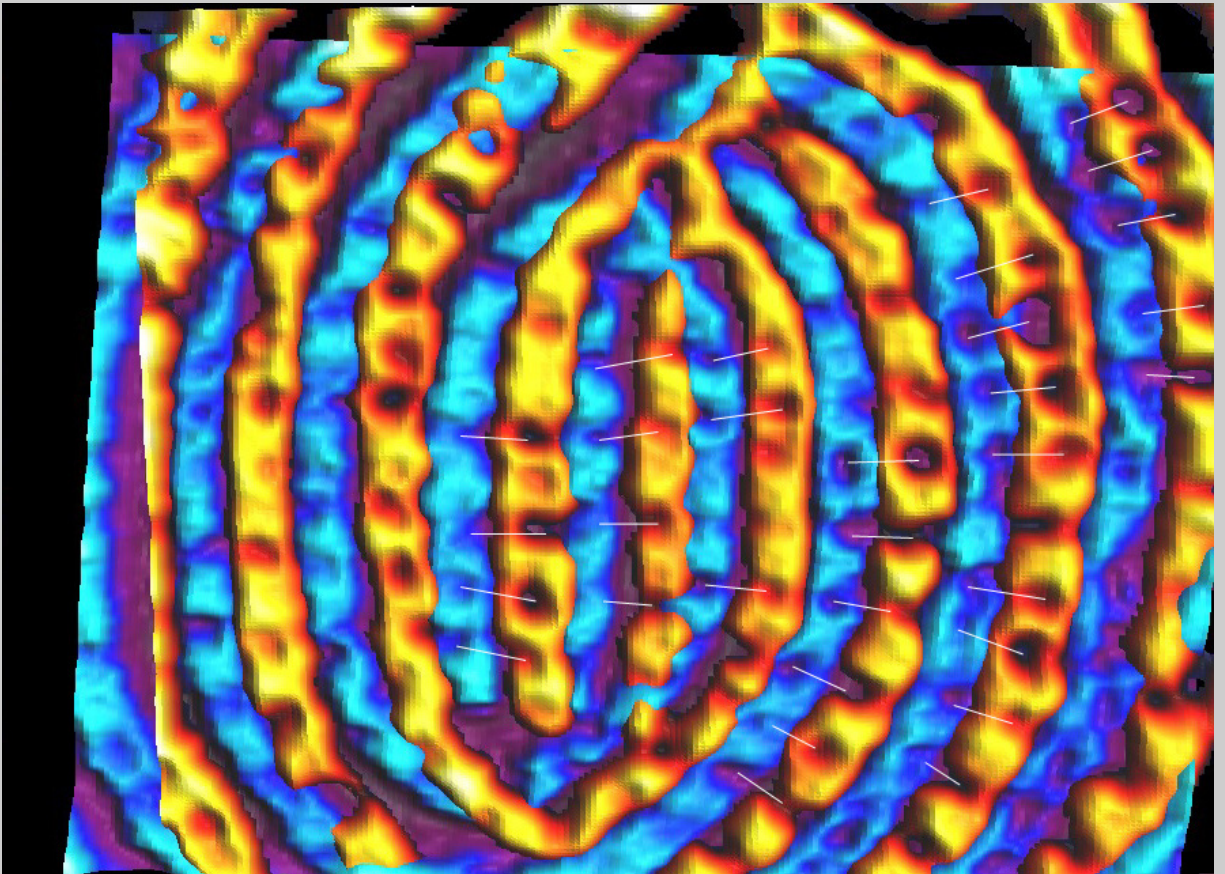


# ScienceGL

## 3<sup>rd</sup> Dimension in Forensic Latent Fingerprint Examination



# ScienceGL Software

## 3D Imaging for AFIS

### New Advanced 3D visualization software for fingerprint images

ScienceGL offers new 3D visualization solutions and tools for Fingerprint Identification System (AFIS). The software provides both fingerprint image enhancement and multiple image matching. High accuracy in fingerprint matching can be achieved by direct comparison of the images in 3D photorealistic mode. The software is optimized for processing of latent fingerprint images. Designed for detailed forensic print biometrics, Fingerprint 3D comparator significantly improves difficult cases identification. The 3D comparator combines virtual reality visual perception with scientific grade precision in quantitative interactive reports. The software is a unique combination of traditional 2D and advanced 3D fingerprint enhancement algorithms.

### Features AFIS specific:

- Original 2d to 3d construction algorithm of highest possible feature enhancement
- Multiple fingerprints in one 3D screen, simultaneous analysis
- 3D and 2D mode specific to compare poor quality 3D enhanced and good quality 2D images in the same screen
- 3D print comparator and matcher relative scaling, rotation, matching movement with interactive mouse
- Maximum possible information from latent print images.

### 3D specific:

- Graphic card accelerated highly optimized 3D visualization
- Animation, fast real time (up to 50 fps) virtual reality
- Scientific grade true math 3D surface constructor of double precision resolution

### Interactive Tools:

- Interactive orthogonal cut planes
- 1D cut plot (surface/plane intersections)
- Interactive mouse operating measurement tools XYZ distances, area, volume, etc.
- Range of interest (ROI) selection tool
- Multiple 3D markers (pins) for minutiae marking
- Mouse position XYZ read out
- True 3D XYZ axis, user format or auto formatted. Scalable captions, labels, grids
- Multiple 3D text labels: selectable color, size, position, orientation
- Waterline height comparison tool

### Platform:

- Windows XP, 2K, NT, 9x, Vista support
- Turn key application or component
- C#, .NET, ActiveX, SDK

