New 360-degree Imaging Developments for iSTAR Camera

NCTech, a developer of reality imaging systems, has announced two new developments for its industrial-grade iSTAR panoramic camera. The company will be demonstrating these developments next week at the SPAR 3D conference and trade show in Houston, Texas, USA.

Designed for rapid 360-degree imaging, iSTAR is a panoramic camera that precisely captures full spherical immersive images and high-resolution panoramic data streams for fast, efficient visual documentation of an environment. The new developments are as follows:

**NCTech** has developed a new software development kit (SDK) for measurement. This enables iSTAR users to take measurements from directly within a spherical image by combining a ‘stereo pair’ of iSTAR images. NCTech is providing the SDK free of charge to enable third-parties to build the measurement capability into their own software.

**Applications**

With an accuracy of approximately 0.1 – 1% (i.e. 1-10mm across a 1m length), the measurement capability is intended for applications in architecture, surveying, construction and forensics. Key benefits to these markets include iSTAR’s high speed of capture and the ability to rapidly cover large areas on-site and take measurements later.

In situations that do not require the accuracy of a laser scanner, being able to quickly capture reasonably accurate point-to-point measurements from within an iSTAR panoramic image is a very useful capability, said Neil Tocher, CTO, NCTech. The company has developed this SDK in response to customer enquiries who have indicated that a faster way to generate measurements would be of interest.

Arithmetica, the company behind the SphereVision suite of software, is one of the first to integrate the iSTAR SDK for measurement. Mark Senior, business development manager at Arithmetica. By supporting the iSTAR it is now possible to offer users of SphereVision Project Suite the ability to capture accurate measurements from 360 degree images captured in stereo pair mode with the iSTAR camera. This is in addition to the existing functionality that allows them to integrate maps, plans and layouts and enhance with links to other rich media such as video and audio to build an interactive view.

**Colorization**

NCTech’s ColourCloud software has been integrated to allow direct import of raw image data from iSTAR to colorize scans captured by FARO laser scanners, all within the FARO SCENE software environment.

Making colorization of laser scans as easy as possible is what NCTech aims to do, and the best way to reach that goal is to ensure that users can do everything from within their familiar software environment, said Cameron Ure, CEO, NCTech. This new integration for FARO users follows on from their recent Leica collaboration and the company looks forward to announcing further integration developments in due course.