

[Request Information](#)

[Permalink](#)

## Precision 3D Modeling Technology

Tech ID: 33419 / UC Case 2023-739-0

### BRIEF DESCRIPTION

An innovative technology that uses a device to move any imaging device precisely through a path in 3D space, enabling the generation of high-resolution 3D models.

### ADVANTAGES

Enhanced precision and accuracy in 3D modeling.

Increased reproducibility due to reduced manual operation.

Capability to operate with any imaging instrument.

Expansion of potential applications due to the high precision and versatility of the technology.

#### Problems Solved:

- » Limitations in the reproducibility of 3D images due to manual operation.
- » Difficulty in generating high-resolution 3D models from 2D images.
- » Challenges in the perfect alignment of 2D images in 3D space.

### APPLICATIONS

3D modeling and design for industries such as architecture, engineering, and design.

Medical imaging and diagnostic tools.

Scientific research, particularly in fields that rely heavily on accurate 3D models.

Gaming and animation industry, particularly those requiring high-resolution models.

### FULL DESCRIPTION

This technology employs a device that can move any imaging instrument (2D or 3D) accurately through a prescribed path in 3D space while the imaging device captures images. The precise path then allows the captured images to be aligned in 3D space, which in turn enables the creation of high-precision and high-resolution 3D models of the object being imaged.

### PATENT STATUS

Patent Pending

### CONTACT

Richard Y. Tun  
tunr@uci.edu  
tel: 949-824-3586.



### INVENTORS

- » Browne, Andrew

### OTHER INFORMATION

### CATEGORIZED AS

- » **Engineering**
  - » Engineering
  - » Other
- » **Imaging**
  - » 3D/Immersive
  - » Medical
- » **Medical**
  - » Devices
  - » Diagnostics
  - » Imaging
  - » Research Tools
- » **Research Tools**

» Other

## RELATED CASES

2023-739-0

### ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ [Advanced Imaging By LASER-Trained Algorithms Used To Process Broad-Field Light Photography and Videography](#)
- ▶ [Advanced Imaging by LASER-Trained Algorithms Used to Process Broad-Field Light Photography and Videography](#)

**UCI** Beall  
Applied Innovation

5270 California Avenue / Irvine, CA  
92697-7700 / Tel: 949.824.2683



© 2024, The Regents of the University of  
California  
[Terms of use](#)  
[Privacy Notice](#)