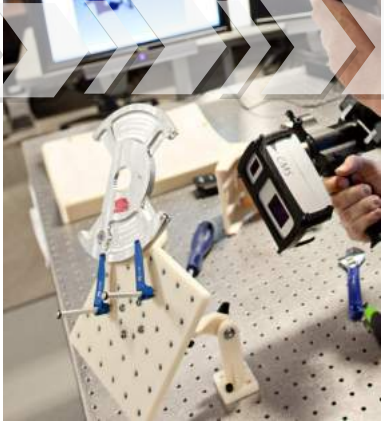
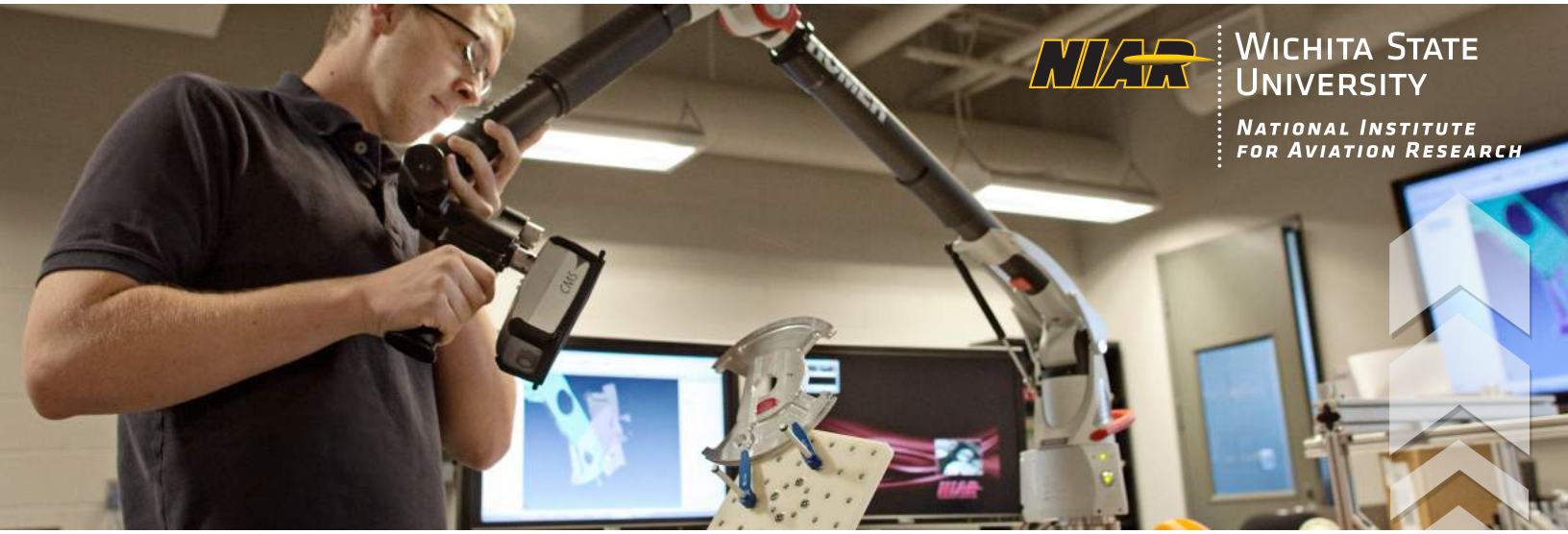
The Reverse Engineering Laboratory supports local and national industry to create 3D models from physical parts and products. Within one lab, we can reverse engineer a part, make design modifications and inspect to the new design or original CAD data.



REVERSE ENGINEERING



CAPABILITIES

- High Detailed 3-D Laser Scanning and point cloud generation
- Long Range 3-D Laser Scanning and point cloud generation
- Digital Inspection of physical parts
- Reverse Engineering physical parts to solid
- CAD geometry is part of the Reverse Engineering physical parts to solid CAD Geometry

LAB EQUIPMENT

- **Hexagon Metrology 4.5.4 SF CMM**
  - Shop Floor CMM
- **6' Romer Absolute Arm**
  - Point repeatability less than .025mm
- **CMS 108 Scan Head to attach to Romer Arm**
  - Captures 30,000 points per second
  - Point Cloud Accuracy: 0.002"
- **Leica P40 HDR 3D Scanner**
  - Hemispherical scanning up to 885ft
  - Up to 1 million points per second
  - HDR imaging integrated into scan data
- **Leica Absolute Tracker AT901 & Leica Absolute Tracker AT960**
  - Portable Long range CMM and Target Tracking
  - T-Scan, T-Probe, T-Mac
  - Long Range Scanning and Probing
- **Surphaser25HSX Hemispherical Scanner**
  - Portable long range scanning
  - 1.2 million points per second scanning
  - Range: Approximately 200ft
- **Cognitens WLS400A White Light System**
  - Field of View: 20"x20" or 27.5"x27.5"
- **Q-Flash White Light System**
  - Field of View: 14"x14"
  - Point Cloud Accuracy: 0.004"
  - Portable and handheld
- **Creaform Go!SCAN 50**
  - Handheld portability
  - Instant data alignment from parts geometry
  - Full Color Scan
  - Part Size range 1 – 10ft

SOFTWARE AVAILABLE

- CATIA V5 & V6
- Spacial Analyzer
- Polyworks
- Magics

CONTACT

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