

# Darren L. Hauser

National Center for Airborne Laser Mapping  
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## Formal Education

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**University of Houston** Houston, TX  
Master of Science August 2013  
*Geosensing Systems Engineering & Sciences*  
*Thesis: Three-Dimensional Accuracy Analysis of a Mapping-Grade Mobile Laser Scanning System*

**Pennsylvania State University** Dallas, PA  
Bachelor of Science May 2011  
*Surveying Engineering*

## Professional Experience

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**National Center for Airborne Laser Mapping** Houston, TX  
*Research Scientist* September 2013–Current

- Performed airborne laser terrain mapping for geological, geoscience, and archaeological applications
- Performed terrestrial laser scanning for civil, geological, and geoscience applications
- Assisted in research, testing, and analysis of active and passive remote sensing systems

**University of Houston** Houston, TX  
*Research Assistant* September 2011–August 2013

- Researched and implemented laser mapping systems on mobile platforms
- Performed terrestrial laser scanning for civil, geological, and geoscience applications
- Assisted in building and testing compact laser scanner and inertial navigation systems

**Navarro & Wright Consulting Engineers** Towanda, PA  
*Geospatial Technician* May 2010–August 2011

- Directed stakeout surveys for natural gas pipelines and horizontal directional drilling
- Surveyed and planned control traverses for property boundary and well pad location

## Selected Papers

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Kenneth W. Hudnut, Benjamin A. Brooks, Katherine Scharer, Janis L. Hernandez, Timothy E. Dawson, Michael E. Oskin, J. Ramon Arrowsmith, Christine A. Goulet, Kelly Blake, Matthew L. Boggs, Stephan Bork, Craig L. Glennie, Juan Carlos Fernandez-Diaz, Abhinav Singhanian, Darren Hauser, and Sven Sorhus. "Airborne Lidar and Electro-Optical Imagery along Surface Ruptures of the 2019 Ridgecrest Earthquake Sequence, Southern California." *Seismological Research Letters* 91, no. 4 (2020): 2096–2107. doi: 10.1785/0220190338.

Juan Carlos Fernandez-Diaz, William E. Carter, Craig Glennie, Ramesh L. Shrestha, Zhigang Pan, Nima Ekhtari, Abhinav Singhanian, Darren Hauser, and Michael Sartori. "Capability Assessment and Performance Metrics for the Titan Multispectral Mapping Lidar." *Remote Sensing* 8, no. 11 (2016): 936. doi: 10.3390/rs8110936.

Hauser, Darren, Craig Glennie, and Benjamin Brooks. "Calibration and Accuracy Analysis of a Low-Cost Mapping-Grade Mobile Laser Scanning System." *Journal of Surveying Engineering* 142, no. 4 (2016): 04016011. doi: 10.1061/(ASCE)SU.1943-5428.0000178.

Brooks, Benjamin A., Craig Glennie, Kenneth Hudnut, Todd Ericksen, and Darren Hauser. "Mobile Laser Scanning Applied to the Earth Sciences." *Eos, Transactions, American Geophysical Union* 94, no. 36 (2013): 313–315. doi: 10.1002/2013EO360002.

Glennie, Craig, Benjamin Brooks, Todd Ericksen, Darren Hauser, Kenneth Hudnut, James Foster, and Jon Avery. "Compact Multipurpose Mobile Laser Scanning System—Initial Tests and Results." *Remote Sensing* 5, no. 2 (2013): 521–538. doi: 10.3390/rs5020521.

## **Relevant Fieldwork**

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Alaska – Airborne laser scanning of NGEE arctic field sites in support of ORNL and LANL	2021
California – Airborne laser scanning of Ridgecrest Earthquake Sequence in support of USGS, NAWS China Lake, and City of Ridgecrest	2019
Central America – Airborne laser scanning campaign of archaeological sites in Mexico, Guatemala, Belize, and El Salvador	2019
Hawaii – Airborne laser scanning of active Kilauea Volcano eruption in support of USGS	2018
Guatemala – Airborne laser scanning and hyperspectral imaging of archaeological and ecological sites in support of PACUNAM	2016–2019
Alaska – Airborne laser scanning of min-max glacier ice in support of USGS and USACE	2016
Antarctica – Airborne laser scanning and imagery mapping of the McMurdo Dry Valleys in support of USAP	2014–2015
Oman – Terrestrial laser scanning and hyperspectral imaging of the exposed Semail Ophiolites	2014

## **Technical Skills**

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NCEES Fundamentals of Surveying Certification

FAA Remote Pilot Certification