Josh Lambert

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Professional Preparation

Academic Background
   B.S. Geographic Information Science, Texas State University, 2012
   Associate of Arts Anthropology, Austin Community College, 2009

Professional Appointments

Present Position: Research Scientist Associate, Bureau of Economic Geology, The University of Texas
   at Austin (February 2014 - Present).
Reservoir Characterization Research Laboratories, Bureau of Economic Geology, The University of
   Texas at Austin (July 2013 - February 2014).
- Work with spatial data in regards to outcrop modeling
- Use remote sensing techniques (LIDAR, aerial imagery, photogrammetry technology) to create and
   manipulate 3D data
- Gather, create, and manipulate data for GIS based analysis
-Conduct and support research with GIS and remote sensing techniques

Interra Project, Bureau of Economic Geology, The University of Texas at Austin (May 2013 - July
   2013).
- Use Petra and ArcGIS to work in projects
 - Digitize and create create spatial data for use in GIS software
 - Find well-logs through online data bases such as Drilling Info, add them to data bases, and
   digitization

State of Texas Advanced Oil and Gas Resource Recovery (STARR), Bureau of Economic Geology, The
   University of Texas at Austin (April 2013 - May 2013).
- Use pressure decay permeability equipment to create permeability profiles for cores
- Photograph cores and rock samples with cameras as well as microscopes.

Core Research Center, Bureau of Economic Geology, The University of Texas at Austin (August 2006
   - April 2013).
- Created acquisitions and process core from donations from various facilities
- Cut various forms of samples from cores
- Archive and handle core samples
- Set up and organized core viewing spaces for research
- Assisted in maintaining the accuracy of the Core Research Center database
- Assess damaged core boxes in an effort to improve the physical longevity of the collection
- Communicate with internal and external patrons in regards to core viewing and sampling requests
- Supervise and train new employees, assign duties as needed
- Use warehouse equipment such as pallet jacks, forklifts, and lift gates to transport geologic
   materials
- Prepare geologic material for transit and shipment

Areas of Expertise

-Remote Sensing and Photogrammetry: Agisoft Photoscan Pro, Polyworks, Quick Terrain Modeler,
ERDAS, Cloud Compare, GPR

-GIS: ArcGIS, Global Mapper, QGIS
-Core Analysis: X-ray Fluorescence handheld device, X-ray diffraction equipment, rebound hammer, core photography
-Adobe Suite
-Programming Languages: C++, Python, SQL (course work only)
-3D Design and Visualization: Blender, Autodesk Meshmixer, Meshlab

Continuing Education

Courses
-Database Programming: Oracle: Austin Community College, Austin, TX, Fall 2017
-Fundamentals of Networking: Austin Community College, Austin, TX, Spring 2017
-Programming Fundamentals II: C++ : Austin Community College, Austin, TX, Fall 2015
-Programming Fundamentals I: Python : Austin Community College, Austin, TX, Spring 2015
-Physical Geology: Austin Community College, Austin, TX, Summer 2014
-General Chemistry: Austin Community College, Austin, TX, Spring 2014

Continuing Education Short Courses Taken
-Web mapping: Texas GIS Forum, 2017
-Unmanned Aerial Systems (Drones): Texas GIS Forum, 2016
-Change Detection Workflows: Texas GIS Forum, 2015
-Fundamentals of Image Processing: Texas GIS Forum, 2015

Service

Published Interviews
-Lambert, J., 2016, Interviewed for GEO ExPro magazine (v. 13, No.1) for article "Drone Magic"

Service
-Bureau of Economic Geology Summer Seminar host, Austin, Texas, 2018
-Bureau of Economic Geology Summer Seminar host, Austin, Texas, 2017
-Bureau of Economic Geology Summer Seminar host, Austin, Texas, 2016

Presentations

Presentations
-RCRL Research Database: Website Updates, Austin, Texas, Industrial Associates meeting, Austin, Texas, October 2019
-Three-Dimensional Characterization of Cave Networks Using Photogrammetry, Virtual Geoscience Conference, Kingston, Ontario, August 2018.
-Use of Unmanned Aerial Vehicles for Digital Outcrop Modeling: presented to annual RCRL Industrial Associates meeting, Austin, Texas, October 2016.
-Use of Unmanned Aerial Vehicles for Digital Outcrop Modeling: presented to University of Texas at Austin, Bureau of Economic Geology Friday Seminar, July 2015.
-Use of Unmanned Aerial Vehicles for Digital Outcrop Modeling: presented to Earth Science Week 2015, Bureau of Economic Geology, July 2015.
-Comparison of Point Clouds Generated from Terrestrial Lidar and Different Methods of Photogrammetry: presented to annual RCRL Industrial Associates meeting, Austin, Texas, October 2014.
-3D Modeling Using Unmanned Aerial Vehicles: presented to Paleo Imaging Workshop, presented at iDigBio, University of Texas, April 2014.

Posters
-Austin Chalk Regional GIS Database of Texas and Louisiana: presented to annual RCRL

-Three-Dimensional Characterization of Cave Networks Using Photogrammetry: Example from Longhorn Cavern, Central Texas: presented to annual RCRL Industrial Associates meeting, Austin, Texas, September 2017.
-Use of Photogrammetry for Digital Characterization of Outcrops: presented to annual RCRL Industrial Associates meeting, Austin, Texas, September 2015.

Publications

Peer Reviewed Journal Articles

Loucks, R. G., Lambert, J. R., Patty, K., Larson, T. E., Reed, R. M., and Zahm, C. K., 2020, Regional overview and significance of the mineralogy of the Upper Cretaceous Austin Chalk Group, onshore Gulf of Mexico: GCAGS Journal, v. 9, p. 1–16.

Lambert, J., Loucks, R. G., and McDaid, G., 2017, Three-dimensional characterization of cave networks using photogrammetry: example from Longhorn Cavern, Central Texas: GCAGS Journal, v. 6, p. 63-72.

Frébourg, G., Ruppel, S. C., Loucks, R. G., and Lambert, J., 2016, Depositional controls on sediment body architecture in the Eagle Ford/Boquillas system: Insights from outcrops in west Texas, United States: AAPG Bulletin, v. 100, no. 4, p. 657-682, http://doi.org/10.1306/12091515101.

Zahm, C., Lambert, J., and Kerans, C., 2016, Use of unmanned aerial vehicles (UAVs) to create digital outcrop models: an example from the Cretaceous Cow Creek Formation: Gulf Coast Association of Geological Societies Journal, v. 5, p. 180-188.

Published Abstracts

Frébourg, G., Ruppel, S. C., Loucks, R. G., and Lambert, J., 2016, Depositional controls on sediment body architecture in the Eagle Ford/Boquillas system: Insights from outcrops in West Texas, USA (abs.): Gulf Coast Association of Geological Societies Transactions, v. 66, p. 953.

Frébourg, G., Ruppel, S. C., Loucks, R. G., and Lambert, J., 2015, Lithological controls and correlativity of the Eagle Ford Formation: outcrop insights from West Texas, USA (abs.): AAPG Datapages/Search and Discovery Article #90216, AAPG Annual Convention and Exhibition, Denver, CO, May 31 - June 3.

Kerans, C., Zahm, C., Bachtel, S., Lambert, J., Danger, N., & Nolting, A. Stratigraphic Evolution of an Icehouse Strandplain System—West Caicos, BWI. In AAPG Annual Convention and Exhibition.