curriculum vitæ of
Ryan J. Herring

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Research Interests

My research primarily focuses on obtaining a quantitative understanding of fluvial and deltaic morphodynamics, geomorphology, stratigraphy, marine geophysics, and halokinesis. Through the course of my research, I seek to derive fundamental relationships in sediment transport using my knowledge of mathematics to study, through experiments and observations, the geomorphological processes of our world and others, with a special emphasis on applying my knowledge of fluvial and deltaic stratigraphy to Mars and Titan via remote sensing, spectral mineralogy, and machine & deep learning. I am also heavily involved in outreach and STEM education, and am always looking for new opportunities.

Education

2022 (Anticipated) — **M.S.** in Earth System Sciences — Yonsei University, Republic of Korea
Adviser: Wonsuck Kim

2019 — **B.S.** in Geological Sciences — The University of Texas at Austin, U.S.A.
Major: Geosciences/Geology (Formerly: Petroleum Engineering)
Minor: Mathematics[1]
Adviser: Cornel Olariu

Research Experience

Jun. 2020 – Sep. 2020 — **Postgraduate Research Scientist** (Intern)
Atmosphere, Climate, and Ecosystem Science Team (ACES)
Earth System Observations Group (EES-14)
Earth and Environmental Sciences Division (EES)
Los Alamos National Laboratory (LANL)
Triad National Security
National Nuclear Security Administration (NNSA)
United States Department of Energy (DOE)
Advisers: Anastasia Piliouras, Jon Schwenk, Joel Rowland

Feb. 2020 – Present — **Researcher**
Morphodynamics and Quantitative Stratigraphy Research Group
Department of Earth System Sciences
Institute of Natural Science
Yonsei University
Adviser: Wonsuck Kim

Aug. 2019 – Jun. 2020 — **Researcher**
GOM/Chicxulub Research Group
Quantitative Sedimentology Research Group
Institute for Geophysics
The University of Texas at Austin
Advisers: John Goff, David Mohrig, Eric Prokocki, Dan Duncan, Marcy Davis

[1] The Jackson School of Geosciences did not recognise minors on transcripts for the 2016-2018 catalogue, but all of the requirements for a mathematics minor were completed per the University of Texas' regulations.

Jun. 2019 – Jun. 2020 **Researcher**
Dynamic Stratigraphy Research Group
Department of Geological Sciences
The University of Texas at Austin
Advisers: Cornel Olariu, Mark Helper, Ron Steel

Jun. 2019 – Aug. 2020 **GIS Programmer/Software Engineer** (Intern)
Groundwater Advisory Unit (GAU)
Railroad Commission of Texas (RRC)
Supervisors: Norman Gearhart, James Harcourt, Royce Massey

Jan. 2017 – Jun. 2019 **Undergraduate Researcher**
Dynamic Stratigraphy Research Group
Morphodynamics and Quantitative Stratigraphy Research Group
Department of Geological Sciences
The University of Texas at Austin
Advisers: Cornel Olariu, Mark Helper, Wonsuck Kim, Ron Steel

Jan. 2017 – Mar. 2017 **Undergraduate Research Collaborator**
Dynamic Stratigraphy Research Group
Department of Geological Sciences
The University of Texas at Austin
Advisers: Austin Clayton, Cornel Olariu, Logan West

Publications

Unclassified Reports *[N = 1]*

Published:

1. **Herring, R.**, Piliouras, A., Schwenk, J., Rowland, J., 2020. Autonomous Machine Learning Identification of Arctic River Ice via Sentinel-1 C-SAR, *United States Department of Energy SULI*, LA-UR-20-28771.

Students' Publications *[N = 2]*

Research group members: †Postdoctoral researcher, ‡Postgraduate student, §Undergraduate student.
Published:

1. §Borja, M., **Herring, R.**, Kim, W., 2021. Morphometric analysis and dimensional trends in Gulf of Mexico minibasin geometries [B.S. thesis]: *Yonsei University*.

Submitted:

1. §Yun, E., **Herring, R.**, Kim, W., 202x. Origin of the roughness transition in Gulf of Mexico minibasin bathymetry [B.S. thesis]: *Yonsei University*.

First-Authored Conference Presentations *[N = 11]*

**Oral presentation*
Research group members: †Postdoctoral researcher, ‡Postgraduate student, §Undergraduate student.
Published:

1. **Herring, R.**, Kim, W., §Borja, M., 2021. Morphometric analysis and basinal dimensional trends in Gulf of Mexico minibasin geometry, *2021 Korean Society of Economic and Environmental Geology Spring Geological Science and Technology Joint Conference*, Abstract PL-6.
2. ***Herring, R.**, §Borja, M., Kim, W., 2020. Basinal dimensional trends in Gulf of Mexico minibasin geometry, *2020 American Geophysical Union Annual Meeting*, Abstract EP065-02.
3. ***Herring, R.**, Piliouras, A., 2020. Autonomous Machine Learning Identification of Arctic River Ice via Sentinel-1 SAR, *20th Annual Los Alamos National Laboratory Student Symposium*.

4. **Herring, R.**, Olariu, C., Helper, M., 2020. Deducing the Timing and Magnitude of Late Quaternary Mississippi River Deltaic Progradation and Retrogradation Coeval with the Waning Phase of the Last Glacio-eustatic Cycle by Modelling Volumetric Flooding Rate and Sediment Discharge Since the Cessation of the Late Wisconsin Glacial Stage, *9th Annual Jackson School Student Research Symposium*, Abstract U-9.

5. *__Herring, R.__, Olariu, C., Helper, M., 2019. The Fate of the Mississippi River Sediment Amidst the Waning Phase of the Last Glacio-eustatic Cycle: A Volumetric Quantification and Modelling of Late Quaternary Deposition Coeval with the Cessation of the Late Wisconsin Glacial Stage, *2019 American Geophysical Union Annual Meeting*, Abstract EP32A-07.

6. **Herring, R.**, Olariu, C., Helper, M., 2019. The Fate of the Mississippi River Sediment Amidst the Waning Phase of the Last Glacio-eustatic Cycle: A Volumetric Quantification and Modelling of Late Quaternary Deposition Coeval with the Cessation of the Late Wisconsin Glacial Stage, *2019 RioMAR Annual Meeting*.

7. **Herring, R.**, Olariu, C., Helper, M., 2019. The Fate of the Mississippi River Sediment During the Last Glacio-eustatic Cycle: A Volumetric Quantification, *2019 American Association of Petroleum Geologists SWS Annual Meeting*, Abstract 90343.

8. **Herring, R.**, Olariu, C., Helper, M., 2019. The Fate of the Mississippi River Sediment During the Last Glacio-eustatic Cycle: A Volumetric Quantification, *8th Annual Jackson School Student Research Symposium*, Abstract U-9.

9. **Herring, R.**, Olariu, C., 2018. The Fate of the Mississippi River Sediment During the Last Phase of the Last Glacio-eustatic Cycle: A Volumetric Quantification, *2018 RioMAR Annual Meeting*, Abstract P-1.

10. **Herring, R.**, Olariu, C., 2018. Calculation of the Volume of Late Quaternary Mississippi River Off Shelf Deposits, *7th Annual Jackson School Student Research Symposium*, Abstract SHP-U.

Submitted:

1. **Herring, R.**, Kim, W., §Borja, M., 2021. Elucidating linkages in variations of the first eccentricity and rim rugosity of Gulf of Mexico minibasin geometries via geomorphometric analysis of bathymetric data, *2021 American Geophysical Union Annual Meeting*, Abstract 935751.

Co-Authored Conference Presentations *[N = 2]*

Research group members: †Postdoctoral researcher, ‡Postgraduate student, §Undergraduate student.
Published:

1. §Borja, M., **Herring, R.**, Kim, W., 2021. Morphometric analysis and dimensional trends in Gulf of Mexico minibasin geometries, *Yonsei University Department of Earth System Sciences Undergraduate Research Festival*.

Submitted:

1. Wu, C., Kim, W., Moodie, A., Cardenas, B., **Herring, R.**, Dong, T., Ma, H., Tsai, F., Li, A., Nittrouer, J., 2021. Pace of Meandering and Avulsion Set River Sinuosity near Coast on Earth and Mars, *2021 American Geophysical Union Annual Meeting*, Abstract 994102.

Invited Talks and Lectures

14 Oct. 2021 **Environmental Hydrodynamics Laboratory**, Seoul, Korea

"Geomorphometric Analysis of of Gulf of Mexico Minibasin Geometries"

01 Oct. 2021 **Yonsei University Frontier Seminar**, Seoul, Korea

"Elucidating Linkages in Variations of the First Eccentricity and Rim Rugosity of Gulf of Mexico Minibasin Geometries via Geomorphometric Analysis of Bathymetric Data"

29 Jul. 2021 **Morphodynamics and Quantitative Stratigraphy Research Group**, Seoul, Korea

"Morphometric Analysis and Basinal Dimensional Trends in Gulf of Mexico Minibasin Geometry"

16 Apr. 2021 **Yonsei University Frontier Seminar**, Seoul, Korea

"Morphometric Analysis and Basinal Dimensional Trends in Gulf of Mexico Minibasin Geometry"

08 Apr. 2021 **Morphodynamics and Quantitative Stratigraphy Research Group**, Seoul, Korea
"Morphometric Analysis and Basinal Dimensional Trends in Gulf of Mexico Minibasin Geometry"

03 Apr. 2021 **Yonsei University Department of Earth System Sciences**, Seoul, Korea
"Morphodynamics and Quantitative Stratigraphy Laboratory: Research and Opportunities"

16 Dec. 2020 **American Geophysical Union (AGU) Annual Meeting**, San Francisco, U.S.A.
"Basinal Dimensional Trends in Gulf of Mexico Minibasin Geometry"

04 Nov. 2020 **Morphodynamics and Quantitative Stratigraphy Research Group**, Seoul, Korea
"Autonomous Machine Learning Identification of Arctic River Ice via Sentinel-1 C-SAR"

14 Aug. 2020 **Los Alamos National Laboratory Student Symposium**, Los Alamos, U.S.A.
"Autonomous Machine Learning Identification of Arctic River Ice via Sentinel-1 SAR"

05 Aug. 2020 **Non-group, Los Alamos National Laboratory**, Los Alamos, U.S.A.
"Automated Identification of Arctic River Ice via Sentinel-1 SAR"

08 Jun. 2020 **Morphodynamics and Quantitative Stratigraphy Research Group**, Seoul, Korea
"Basinal Dimensional Variations in Gulf of Mexico Minibasin Geometry"

30 Mar. 2020 **Morphodynamics and Quantitative Stratigraphy Research Group**, Seoul, Korea
"The Fate of the Mississippi River Sediment Amidst the Waning Phase of the Last Glacio-eustatic Cycle"

12 Dec. 2019 **American Geophysical Union (AGU) Annual Meeting**, San Francisco, U.S.A.
"The Fate of the Mississippi River Sediment Amidst the Waning Phase of the Last Glacio-eustatic Cycle"

04 Dec. 2019 **Dynamic Stratigraphy Research Group**, Austin, U.S.A.
"The Fate of the Mississippi River Sediment Amidst the Waning Phase of the Last Glacio-eustatic Cycle"

Conferences

Jun. 2021 **Korean Society of Economic and Environmental Geology Conference** (Presenter)

Jun. 2021 **SEPM International Sedimentary Geosciences Congress (ISGC)**

Mar. 2021 **37th Gilbert Club Annual Meeting**

Dec. 2020 **101st American Geophysical Union (AGU) Annual Meeting** (Speaker & Presenter)

Aug. 2020 **20th Annual Los Alamos National Laboratory Student Symposium** (Speaker)

Feb. 2020 **9th Annual Jackson School Student Research Symposium** (Presenter)

Dec. 2019 **100th American Geophysical Union (AGU) Annual Meeting** (Speaker)

Dec. 2019 **RioMAR Annual Meeting** (Presenter)

Apr. 2019 **American Association of Petroleum Geologists (AAPG) SWS** (Presenter)

Mar. 2019 **University of Texas Institute for Geophysics (UTIG) PLATES Symposium**

Mar. 2019 **50th Lunar and Planetary Science Conference (LPSC)**

Feb. 2019 **8th Annual Jackson School Student Research Symposium** (Presenter)

Dec. 2018 **RioMAR Annual Meeting** (Presenter)

Nov. 2018 **Applied Geodynamics Laboratory (AGL) Annual Meeting**

Jun. – Jul. 2018 **University of Texas Planetary Habitability Pop-Up Institute**

Feb. 2018 **7th Annual Jackson School Student Research Symposium** (Presenter)

Feb. 2017 **6th Annual Jackson School Student Research Symposium**

Workshops

Dec. 2020 **Machine Learning and Deep Learning for the Environmental and Geosciences**

Dec. 2020 **Python for Remote Sensing: Analysis, Visualization, and Workflow for Earth Scientists**

Apr. 2019 **EU-In-Time-Rise Workshop on Geochronology and Mars Exploration** (Session Chair)

Field Experience

May – Jun. 2019 **Marine Geology and Geophysics Expedition in the Gulf of Mexico** UT Institute for Geophysics

Collected, processed, and interpreted multibeam echosounder (MBES) sonar, side-scan sonar, multichannel seismic (MCS), and CHIRP data, in addition to collecting and performing sedimentological analyses on piston/push/box cores and grab samples. Combined these in order to investigate the geomorphological effects of Hurricane Harvey in and offshore of the Corpus Christi Bay and map the lowstand Nueces River valley from the Last Glacial Maxima. Presented findings as team to sponsors.

Jan. – May 2018 **Central Texas** The University of Texas Dept. of Geological Sciences

Teaching Experience

Jan. 2016 – Feb. 2020 **Volunteer Tutor**

Hosted informal weekly review lectures for engineering classmates in sedimentary geology course covering the material learned during the official lecture time due to popular request after helping classmates understand course concepts. Prepared notes over course lectures and study guides to help students prepare for exams.

Mentored Students

Undergraduate Students

Spring 2020 – Present Maria Paula Borja Tibaduiza, *B.S. in Earth System Sciences, Yonsei University.*

Spring 2020 – Present Esoo Yun, *B.S. in Earth System Sciences, Yonsei University.*

Academic Honours and Awards

2020 **Fellow (FRAS)** Royal Astronomical Society

2020 – Present **BK21 Fellowship for Leading Universities & Students (4x)** Republic of Korea

Research fellowship awarded by the Korean Ministry of Education & the National Research Foundation of Korea "to produce the next generation of world class leaders in their fields." Initially provided with a ~~₩~~500,000 per month stipend, but later received a raise of ~~₩~~700,000 per month.

2020 **Outstanding Undergraduate Poster, 2nd Place** UT JSG Student Research Symposium

Awarded by The University of Texas Jackson School of Geosciences and ConocoPhillips for the best research poster of the undergraduate division.

2019 – Present **Global Leader Fellowship** Yonsei University

Most prestigious fellowship at Yonsei University, given to only 7 newly admitted graduate students per application period. Covers full entrance and tuition fees, and provides a ~~₩~~500,000 per month stipend.

2019 **Fellow (FGS)** Geological Society of London

2019 **William S. Flores Sr. Field Scholarship** The University of Texas at Austin

2019 **2nd Annual UGS Scholarship, 1st Place** Undergraduate Geological Society

For "embodying the values of the Jackson School of Geosciences" and for being "heavily involved in research, seminars, as well as connecting with fellow undergraduates and faculty of our department."

2018 **1st Annual UGS Scholarship, 1st Place** Undergraduate Geological Society

For "embodying the values of the Jackson School of Geosciences" and for being "heavily involved in research, seminars, as well as connecting with fellow undergraduates and faculty of our department."

2016 & 2017 **University Honours (2x)** The University of Texas at Austin

2015 **Foresters Competitive Scholarship** Foresters Financial

2015 **West Point Bridge Design Competition, Top 50** The U.S. Military Academy at West Point

National structural engineering competition with several thousand competitors. Awarded by The U.S. Military Academy at West Point, and the American Society of Civil Engineers.

2014 **Engineering 12EE Energy Contest, 1st Place** Texas A&M University

Led team in designing the most efficient wind turbine which was more than twice as efficient as the 2nd place design through proper application of Betz's law.

2014 **Eagle Scout** Boy Scouts of America, Troop 440

Technical Skill Set

Computer Software:

Remote Sensing: Harris Geospatial ENVI, Google Earth Engine.
Geophysical Acquisition/Processing/Interpretation: Fledermaus, Landmark, Teledyne CARIS (HIPS & SIPS), Paradigm, QINSy, EdgeTech Discover, Fugawi, WinRiver II, Okular, Omniviewer.
Lidar: Leica Cyclone.
GIS: Esri ArcGIS (Pro, ArcMap, ArcScene, ArcCatalog, Collector), Blue Marble Geographics Global Mapper.
Engineering CAD: Autodesk (AutoCAD, Inventor), Solidworks, PTC Creo, Google SketchUp (Pro, Studio).
IDE: Spyder, Anaconda, JupyterLab, PyCharm (Professional), RStudio, TeXstudio, Texmaker, Overleaf.
Particle Analysis: GRADISTAT, Femto PSS.
Miscellaneous: MS Access, Schlumberger BlueView, Adobe (Photoshop, Illustrator), Neuralog, Vernier Logger Pro.

Programming Languages:

Python, MATLAB, R, JavaScript, VBA, Wolfram, Mathematica, LaTeX.

Operating Systems:

Linux/UNIX.

Other Technical Skills:

- Skilled in machine learning and deep learning of satellite derived data.
- Skilled in mathematics, including vector calculus and differential equations, as well as proof writing for higher dimensional non-Euclidean geometries.
- Skilled in collecting, processing, and interpreting multibeam echosounder (MBES), sidescan sonar, multichannel seismic (MCS), and CHIRP seismic data.
- Skilled in conducting flume experiments of 2D/3D deltas, 2D/3D alluvial fans, 3D meandering rivers, 2D/3D æolian bedforms, and 2D turbidity currents.
- Skilled in numerical modelling and geomorphometric analysis.
- Skilled in analysis of multispectral and hyperspectral data from the Earth, the moon, Mars, and Titan from wavelengths across the electromagnetic spectrum, including VNIR, thermal infrared, ultraviolet, and radar.
- Skilled in deriving topography from Lidar and stereogrammetry, and in use of SAR and InSAR data.
- Skilled in interpretation of remote sensing data, including via spectral mineralogy, environmental metrics such as NDVI/EVI, and spectral mixture analysis.
- Skilled in optical mineralogy and petrographic microscope use.
- Skilled in collecting and performing sedimentological analyses on piston/push/box cores and grab samples.
- Skilled in processing and interpretation of data obtained via wireline logging, including gamma ray, neutron porosity, electrical resistivity, spontaneous potential, and nuclear magnetic resonance (NMR).
- Skilled in various forms of engineering CAD software, 3D modelling software, and 3D printing, as well as machine shop work (mill, lathe, etc.).
- Possesses strong knowledge of palæontology and skilled at identifying fossils.

Non-programming Languages:

English (native), Русский (limited), Deutsch (limited), Français (limited), 한국 (very limited).

Public Outreach, Community Service, and Leadership

Mar. 2020 – Present

Ambassador for Morphodynamics and Quantitative Stratigraphy Laboratory

Serving as an ambassador to the public and the wider scientific community for the Morphodynamics and Quantitative Stratigraphy Research Group. Represented the research group at outreach events in order to recruit new students to the lab.

Oct. 2019 – Present **Ambassador for Marine Geology and Geophysics Field Course**

Serving as an ambassador to the public and the media for the UTIG Marine Geology and Geophysics Field Course in order to raise funds to support future expeditions, by shooting videos and publishing media about my experience, and working to educate the public about the importance of the expedition. Helped to raise $12,308, surpassing the $10,000 goal.

Sep. 2019 – Feb. 2020 **Geoscience Ambassadors**

As an ambassador, worked to develop my story on how I became a geoscientist to share with my home community in order to educate the members of my community on what the geosciences are and get people interested in studying geosciences.

May 2019 **OnRamps**

Gave presentations to high school students in the OnRamps programme about why they should pursue a university education in STEM and a degree in the geosciences.

Apr. 2019 **Session Chair at EU-In-Time-Rise Workshop on Geochronology and Mars Exploration**

Chaired session on Martian analogues.

Sep. 2018 **GLOW Undergraduate Research Panel**

Panellist for the Geoscience Leadership Organization for Women's undergraduate research panel. Spoke to undergraduate students about how to get involved in research, what doing research was like, and how to have good time management in order to properly balance their work life with their personal and school lives.

Oct. 2017 **Palæontological Society of Austin's 27th Annual Fossil Fest**

Ran the University of Texas' exhibit at the event and educated children and parents about dinosaur evolution into birds and why, phylogenetically, certain organisms are classified as dinosaurs while others are not.

May 2014 – Sep. 2015 **Northwest Assistance Ministries**

Office in Administration and Development, managed volunteer recruitment and coordination of volunteer activities related to poverty alleviation.

Aug. 2003 – Present **Boy Scouts of America, Troop/Crew 440**

Eagle Scout currently giving back to scouting as an Assistant Scoutmaster at Troop 440.
Held many leadership positions in both Boy Scouts and Venture Scouts teaching outdoor skills and lead thousands of hours of community service. Achieved rank of Brotherhood in the Order of the Arrow, scouting's honour society.
Leadership positions held: *Assistant Scoutmaster, Junior Assistant Scoutmaster, Vice President of Programme, Vice President of Administration, Assistant Senior Patrol Leader, Patrol Leader, Assistant Patrol Leader, Quartermaster, Secretary, Scribe, Denner, Assistant Denner.*

Relevant Coursework

**postgraduate-level coursework*

Geology:
Marine Geology and Geophysics Field Course*, Remote Sensing*, Morphodynamics/Quantitative Stratigraphy (2x)*, Geofluids Dynamics*, Stratodynamics (2x)*, Modelling of Depositional Mechanics*, Geomorphology*, GIS/GPS*, Biogeochemisty*, Environmental Geology*, Structural Geology*, Field/Stratigraphic Methods, Sedimentary Geology (2x), Igneous/Metamorphic Petrology (2x), Palæontology (2x)*, Research Design/Data Analysis (3x)*, Ethics in Geosciences.

Mathematics:
Structure of Modern Geometry* (Proof writing for higher dimensional non-Euclidean geometries), Vector Calculus*, Ordinary and Partial Differential Equations with Linear Algebra*, Differential Calculus, Integral Calculus, Multivariable Calculus.

Engineering/Physics:
Hydraulics/Open Channel Flow*, Engineering/Energy and the Environment, Petroleum Engineering, Geosystems Engineering MATLAB, Mechanical Engineering, Engineering Mechanics, Engineering Physics I (Mechanics, Heat, Wave Phenomena) & Engineering Physics II (Electricity and Magnetism, Optics, Atomic Phenomena) with laboratories.

Biochemistry/Chemistry:
Astrobiology*, Chemistry I & II with laboratories.

Professional Affiliations and Student Organisations

Jun. 2021 – Present **The Korean Society of Economic and Environmental Geology (KSEEG)**

Feb. 2021 – Present **European Astronomical Society (EAS)**

Oct. 2021 – Present	**Royal Astronomical Society (RAS)** *Fellow (FRAS)*
Sep. 2019 – Feb. 2020	**The University of Texas Mathematics Club**
Sep. 2019 – Feb. 2020	**Geoscience Ambassadors** *Ambassador*
Aug. 2019 – Present	**Quantitative Sedimentology Research Group** *The University of Texas Department of Geological Sciences Research Group*
Aug. 2019 – Present	**GOM/Chicxulub Research Group** *The University of Texas Institute for Geophysics Research Group*
Feb. 2018 – Feb. 2020	**Society of Petrophysicists and Well Log Analysts UT Student Chapter**
Nov. 2019 – Present	**American Geophysical Union (AGU)**
Aug. 2018 – Feb. 2020	**Texas Geophysical Society (TGS)**
Aug. 2018 – Feb. 2020	**American Association of Petroleum Geologists (AAPG) UT Student Chapter**
Aug. 2018 – Feb. 2020	**Geoscience Leadership Organization for Women (GLOW)**
Jun. 2018 – Present	**The University of Texas Centre for Planetary Systems Habitability (CPSH)** *Interdisciplinary effort to establish a Centre for Planetary Systems Habitability*
Oct. 2017 – Present	**Morphodynamics and Quantitative Stratigraphy Research Group** *The University of Texas and Yonsei University Research Group*
Oct. 2017 – Present	**Geological Society of London** *Fellow (FGS)*
Jun. 2017 – Feb. 2020	**Undergraduate Geological Society (UGS)**
Jan. 2017 – Present	**RioMAR Consortium** *Research consortium between the Colorado School of Mines, The University of Texas, and Yonsei University*
Jan. 2017 – Present	**Steel Research Group (Dynamic Stratigraphy Workgroup)** *The University of Texas Department of Geological Sciences Research Group*
Jan. 2016 – Jan. 2017	**Texas State Parks Club**
Aug. 2015 – Jun. 2017	**American Association of Drilling Engineers (AADE) UT Student Chapter**
Aug. 2015 – Jun. 2017	**Society of Petroleum Engineers (SPE) UT Student Chapter**
Aug. 2015 – Jun. 2017	**The University of Texas Polo Team** *Club team member*

Hobbies and Interests

Teaching, research, fieldwork, scouting, backpacking, polo, piano, flying, sailing, oil painting, opera.

References

Dr. Wonsuck Kim, Associate Professor
Yonsei Dept. Earth System Sciences
Email: delta@yonsei.ac.kr

Dr. Anastasia Piliouras, Scientist
Los Alamos National Laboratory, EES-14
Email: apiliouras@lanl.gov

Dr. Cornel Olariu, Research Scientist, Lecturer
UT Austin Dept. Geological Sciences
Email: cornelo@jsg.utexas.edu

Dr. John Goff, Senior Research Scientist
UT Institute for Geophysics
Email: goff@utig.ig.utexas.edu

Dr. Chenliang Wu, Postdoctoral Researcher
Yonsei Dept. Earth System Sciences
Email: wuchenliang1@gmail.com

Dr. David Mohrig, Associate Dean for Research
UT Austin Dept. Geological Sciences
Email: mohrig@jsg.utexas.edu

Dr. Mark Helper, Distinguished Sr. Lecturer
UT Austin Dept. Geological Sciences
Email: helper@jsg.utexas.edu

Dr. Timothy Goudge, Assistant Professor
UT Austin Dept. Geological Sciences
Email: tgoudge@jsg.utexas.edu

Dr. Sean Gulick, Research Professor
UT Institute for Geophysics
Email: sean@ig.utexas.edu