Ronnakrit Rattanasriampaipong

NOAA Climate & Global Change Postdoctoral Fellow
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Education

Texas A&M University — College Station, TX
Ph.D. in Oceanography (Paleoceanography/Organic Geochemistry) — 2018–2023

Chulalongkorn University — Bangkok, Thailand
M.S. in Petroleum Geoscience (International Program) — 2015–2016
B.S. in Geology — 2009–2013

Professional Appointments

The University of Arizona, Department of Geosciences — Tucson, AZ
NOAA Climate & Global Change Postdoctoral Fellow — 2023–Present

Texas A&M University, Department of Oceanography — College Station, TX
Graduate Research Assistant — 2018–2023
Graduate Teaching Assistant — 2022–2023
Graduate Assistant Lecturer — 2021–2022

Chevron Thailand Exploration and Production, Limited — Bangkok, Thailand
Petroleum Geologist, Satun-Funan Asset Team — 2016–2018
Horizon Earth Scientist, Reservoir Management Team — 2013–2016
Undergraduate Student Intern, Reservoir Management Team — Summer 2012/2013

Research Interests

My research interest is centered around utilizing data-driven approaches to uncover new perspectives in paleoceanography and organic geochemistry. I place a special emphasis on lipid-biomarker-based paleoenvironmental reconstructions from ancient marine sediments across the Mesozoic–Cenozoic period and proxy system model development.

Fellowships & Grants

Awarded a total of **$326,000** in research funding.

NOAA Climate & Global Change Postdoctoral Fellowship — 2023–2025
Awarded $200,000 for two years; up to 8 candidates worldwide

Texas A&M Dissertation Fellowship — 2023–2024
Awarded $24,000 for one year; up to 15 candidates university-wide

Texas Sea Grant's Grants-In-Aid Graduate Research Grant — 2022–2024
Awarded $2,000 for two years

Schlanger Ocean Drilling Fellowship — 2021–2022
Awarded $30,000 for one year; up to 8 candidates nationwide

Fulbright Thai Graduate Scholarship — 2018–2020
Awarded $70,000 for two years; up to 7 candidates nationwide

Publications

Papers published in refereed journals

64 total citations, h-index 3 | google scholar

3. Judd, E. J., Tierney, J. E., Huber, B. T., Wing, S. L., Lunt, D. J., Ford, H. L., Inglis, G. N., McClymont, E. L., O'Brien, C. L., **Rattanasriampaipong, R.**, Si, W., Staitis, M. L., Thirumalai, K., Anagnostou, E., Cramwinckel, M. J., Dawson, R. R., Evans, D., Gray, W. R., Grossman, E. L., Henehan, M. J., Hupp, B. N., MacLeod, K. G., O'Connor, L. K., Sánchez Montes, M. L., Song, H., and Zhang, Y. G. (2022). The PhanSST global database of Phanerozoic sea surface temperature proxy data. *Scientific Data*, 9(1). https://doi.org/10.1038/s41597-022-01826-0. *Tier II authorship. Served as a co-lead author on TEX_{86} data compilation and curation.*
2. **Rattanasriampaipong, R.**, Zhang, Y. G., Pearson, A., Hedlund, B. P., and Zhang, S. (2022). Archaeal lipids trace ecology and evolution of marine ammonia-oxidizing archaea. *Proceedings of the National Academy of Sciences*, 119(31):e2123193119. https://doi.org/10.1073/pnas.2123193119
1. **Rattanasriampaipong, R.** (2016). Potential sources of mercury in Southern Pattani Basin, the Gulf of Thailand. *Bulletin of Earth Sciences of Thailand*, 8(2 SE - Research Articles):133–144. http://dx.doi.org/10.13140/RG.2.2.33243.67369

Manuscript(s) under review, under revision, preprint and/or in-press

1. **Rattanasriampaipong, R.**, Zhang, Y. G., Alo, O., Liu, X.-L., Zhang, Y., Kim, B., Marcantonio, F., Bassinot, F., and Li, T. (2024). Methylation index of Overly Branched tetraether lipids (MOB): a proxy for deep ocean (de)oxygenation? *ESS Open Archive*

Manuscript(s) in preparation

3. **Rattanasriampaipong, R.**, Tierney, J. E., and Abell, J. T. (*in preparation*). A nutrient effect on the TEX_{86} paleotemperature proxy
2. Elling, F., Inglis, G., and many others including **Rattanasriampaipong, R.** (*in preparation*). Archaeal tetraether lipids in marine sediments as tracers for past environmental change. *Tier II authorship. Served as a lead author on 'sources of archaeal lipids in the oceans' section.*
1. Bijl, P. K., Sliwinska, K. K., Duncan, B., Huguet, A., Naeher, S., **Rattanasriampaipong, R.**, Sosa-Montes de Oca, C., Auderset, A., Berke, M., Kim, B. S., Davtian, N., Dunkley Jones, T., Eefting, D., Elling, F. J., O'Connor, L., Pancost, R. D., Peterse, F., Pierrick, F., Rice, A., Sluijs, A., Varma, D., Villanueva, L., Xiao, W., and Zhang, Y. G. (*in preparation*). Best practices for the use of marine GDGTs as proxy for paleotemperatures: sampling, processing, analyses, interpretation, and archiving protocols. *Tier II authorship. Served as a lead author on 'data reporting and archiving' section.*

Technical Reports

1. **Recommended Location, Logging and Coring Program Geological Reports**, Chevron Thailand 2013–18
   - Performed a full assessment for four drilling projects (>50 drilled wells for gas reservoirs), including evaluting geological risks and economic justifications as well as recommending wireline logging and formation testing program.

Research Experience

Postdoctoral Research, Department of Geosciences, The University of Arizona 2024–present
Mentor: Jessica E. Tierney
Title: *TEXAS: Towards a full proxy system modeling of TetraEther indeX of Ammonia oxidizerS and reanalysis of temperature trends for the past 100 million years*

- Designed and built a full proxy system modeling framework for the TEX_{86} paleotemperature proxy

- Identified the influence of nutrient levels on the TEX_{86} proxy, termed "nutrient stress," in surface marine sediments and characterized lipid distributions in both global- and regional-scale patterns

Doctoral Dissertation Research, Department of Oceanography, Texas A&M University 2018–2023
Advisor & Committee Chair: Yige Zhang
Committee Members: Ethan Grossman, Robert Korty, Jason Sylvan
Close Research Collaborators & Mentors: Ann Pearson (Harvard)
Title: *Beyond TEX_{86}: Evaluating Archaeal Evolution Coupled with Oceans and Climate Changes using Tetraether Lipids*

- Characterized archaeal lipid distribution patterns linked to archaeal ecology in marine environments

Master's Thesis, Department of Geology, Chulalongkorn University 2016
Advisor: John Warren
Title: *Potential Sources of Mercury in Southern Pattani Basin, the Gulf of Thailan*

Undergraduate Senior Year Research, Department of Geology, Chulalongkorn University 2011–2013
Advisor: Kruawun Jankaew
Title: *Quantification of Tsunami Magnitude from Sedimentation Modeling of Re-occurring Indian Ocean Tsunamiites at Phra Thong Island, Phang Nga, Thailand*

Teaching Experience

Taught and mentored over 700 undergraduate students across multiple courses and formats, including large asynchronous online courses and small, hands-on programming sessions.

Graduate Assistant - Teaching, Department of Oceanography, Texas A&M University 2023

Course(s)	Semester	Studets (Rating)
The Blue Planet - Our Oceans (OCNG 251)	Spring 2023	300 (3.72/5.00)
Data Analysis Methods in Geosciences (GEOS 470)	Spring 2023	30 (5.00/5.00)

Graduate Assistant Lecturer, Department of Oceanography, Texas A&M University 2021–2022

Course(s)	Semester	Studets (Rating)
The Blue Planet - Our Oceans (OCNG 251)	Spring 2021	116 (4.78/5.00)
	Summer 2021	36 (4.86/5.00)
	Summer 2022	48 (4.64/5.00)
	Fall 2022	194 (4.41/5.00)
		[Testimonials]

** Instructor rating for *"The instructor fostered an effective learning environment"* (Scale: 1 = Strongly Disagree, 5 = Strongly Agree).

Cruise/Field Experience

Graduate Research Staff on R/V *Trident* in Galveston Bay, Texas A&M University 2018

- Trained on oceanographic sampling operations on a one-day sampling cruise in Galveston Bay: seawater sampling (Niskin bottles and handheld Conductivity-Temperature-Depth (CTD) tool), seafloor grab sampling, water turbidity using Secchi disk, seawater pumping for biological and trace metal analyses

Shore-based Operational Geologist, Chevron Thailand Exploration and Production Limited 2017

- Achieved 90% accuracy in pre-drill vs. post-drill hydrocarbon reserves estimation for 20 gas wells
- Performed real-time stratigraphic correlation using wireline triple combo logs and reassessed pore pressure profiles during drilling

Wellsite Geologist Trainee, Chevron Thailand Exploration and Production Limited 2014

- Trained to monitor real-time drilling operations in the Gulf of Thailand for two weeks on a barge tender rig
- Key activities: including formation pressure acquisition, formation Integrity Test (FIT) and rig-floor operations

Undergraduate Field Assistant, Chulalongkorn University Multiple trips over summer 2011–2013

- Conducted field excavation and stratigraphic analysis of tsunami deposits on Phrathong Island, Thailand
- Described grain size and sedimentology and collected sand samples for further geochemical analysis

Invited Talks & Lectures

Conducted in English

10/2023 **50th SACNAS NDiSTEM**, Portland, OR
Archaeal lipids trace ecology and evolution of marine ammonia-oxidizing archaea, Talk.

9/2023 **2nd International GDGT Workshop**, Virtual, ETH Zurich, Switzerland
Marine AOA ecology shifts with Earth's climate, Talk. [Slides]

10/2022 **Southern University of Science and Technology (SUSTech)**, China
Archaeal lipids reveal distinct AOA ecology in past warm oceans, Lecture Series on Modern Geobiology. [Slides]

10/2022 **Lamont-Doherty Earth Observatory (LDEO), Columbia University**, NY
A suppression of deep-water clades of marine ammonia oxidizers in past warm oceans, Biology and Paleo Environment (BPE) Seminar Series, Talk.

10/2022 **Pal(a)eo EaRly Career Seminar (Pal(a)eoPERCS)**, Virtual
Untapped potential of archaeal lipids beyond ocean temperature reconstructions, Talk. [Recording]

7/2022 **U.S. Advisory Committee for Scientific Ocean Drilling (USAC)**, Summer Meeting, Virtual
Invited Talk on marine geochemistry and scientific ocean drilling.

12/2021 **Chulalongkorn University, Marine Science Department**, Thailand
The Anthropocene: Human Footprints on Planet Earth, Lecture. [Slides]

Conducted in Thai

1/2023 **Kasetsart University, Department of Earth Sciences**, Thailand
Ammonia Oxidizers in Past Warm Oceans, Lecture. [Slides]

10/2022 **Burapha University, Department of Marine Technology**, Virtual
Inferred paleoecology of marine archaea from today's oceans, Marine Technology Colloquium #62. [Recording]

2/2022 **Chulalongkorn University, Department of Geology**, Virtual
Life after Resignation: 'Fulbright' has So Much to Offer, Talk. [Slides]

9/2020 **Burapha University, Department of Marine Technology**, Virtual
Fossil lipids: Thermometers for the Earth's Climate History, Talk. [Recording]

Presentations

Academic & Scientific Conferences

12. **Rattanasriampaipong, R.**, Tierney, J., Elling, F., and Inglis, G. (2024, December). *Rethinking TEX_{86} temperature calibration with TEXAS-PSM*. Oral presentation at the 2024 AGU Fall Meeting, Walter E. Washington Convention Center, Washington, D.C., USA.

11. **Rattanasriampaipong, R.** and Tierney, J. (2024, August). *TEXAS-PSM: Towards a full proxy system modeling of TetraEther indeX of Ammonia oxidizerS*. Poster presentation at the 2024 Gordon Research Conference on Organic Geochemistry, Holderness School, Holderness, NH, USA.

10. **Rattanasriampaipong, R.** and Tierney, J. (2024, July). *TEXAS-PSM: Towards a full proxy system modeling of TetraEther indeX of Ammonia oxidizerS.* Poster presentation at the 2024 Gordon Research Seminar on Organic Geochemistry, Holderness School, Holderness, NH, USA.
9. **Rattanasriampaipong, R.** and Tierney, J. (2024, July). *Rethinking proxy calibration framework for TEX_{86} paleothermometry.* Oral presentation at the 16th NOAA Climate and Global Change Postdoctoral Fellowship Summer Institute, Holiday Inn, Steamboat Springs, CO, USA.
8. **Rattanasriampaipong, R.**, Zhang, Y. G., Alo, O., Liu, X. L., Zhang, Y., Kim, B., Marcantonio, F., and Bassinot, F. (2023, December). *Bacterial tetraether lipids as a proxy for ocean (de)oxygenation.* Abstract (PP33B-04) presented at the 2023 AGU Fall Meeting, Moscone Center, San Francisco, CA, USA.
7. **Rattanasriampaipong, R.**, Zhang, Y. G., Pearson, A., Hedlund, B., and Zhang, S. (2022, December). *Archaeal lipids suggest ecological shifts of marine ammonia-oxidizing archaea in greenhouse worlds.* Abstract (PP13C-04) presented at the 2022 AGU Fall Meeting, McCormick Place Convention Center, Chicago, IL, USA.
6. **Rattanasriampaipong, R.**, Zhang, Y. G., Pearson, A., Hedlund, B., and Zhang, S. (2022, April). *Tracing ecology and evolution of marine ammonia-oxidizing archaea using archaeal lipid biomarkers.* Oral presentation, Departmental Seminar, Department of Oceanography, Texas A&M University, College Station, TX, USA.
5. **Rattanasriampaipong, R.**, Zhang, Y. G., Pearson, A., and Hedlund, B. (2021, December). *Beyond TEX_{86}: GDGTs Inform Marine Archaeal Community Ecology and Evolution.* Hybrid oral presentation at the 2021 AGU Fall Meeting, Ernest N. Morial Convention Center, New Orleans, LA, USA.
4. **Rattanasriampaipong, R.**, Zhang, Y. G., Pearson, A., Hedlund, B., and Zhang, S. (2021, September). *Beyond TEX_{86}: GDGT Distributions Inform Archaeal Ecology.* Lightning (3-minute) oral presentation at the 2021 PhanTASTIC Workshop.
3. **Rattanasriampaipong, R.** (2021, April). *Closing the gaps of Cenozoic sea surface temperature history using tetraether archaeal lipid biomarkers.* Oral presentation, Departmental Seminar, Department of Oceanography, Texas A&M University, College Station, TX, USA.
2. **Rattanasriampaipong, R.** and Zhang, Y. G. (2019, December). *Towards complete global sea surface temperature reconstructions over the Cenozoic Era.* Poster presentation at the 2019 AGU Fall Meeting, Moscone Center, San Francisco, CA, USA.
1. **Rattanasriampaipong, R.** (2013, April). *Quantification of Tsunami Magnitude from Sedimentation Modeling of Re-occurring Indian Ocean Tsunamiites at Phra Thong Island, Phang Nga, Thailand.* Oral presentation at the Annual Hitachi Senior Project Competition, Faculty of Science, Chulalongkorn University, Bangkok, Thailand.

Industry

4. **Rattanasriampaipong, R.**, Marksamer, A., and Kantatong, P. (2018, April). *A new approach for pore pressure prediction using neutron-density log separation.* Oral presentation at the 2019 Sub-Surface Technical Forum, Chevron Thailand Headquarters, Bangkok, Thailand.
3. **Rattanasriampaipong, R.**, Paiboon, P., and Thatmali, P. (2015, February). *Pattani Basin Regional Pore Pressure Study.* Oral presentation at the Annual Meeting of Chevron Thailand Reservoir Management Forum, Swissotel Le Concorde, Bangkok, Thailand.
2. **Rattanasriampaipong, R.**, Kananithikorn, N., Keawmoon, N., and Prasongtham, P. (2014, June). *Causes of ballooning and lost circulation in Erawan and Satun fields.* Poster presentation at the Bi-Annual Meeting of Chevron Reservoir Management Forum, The Woodlands Waterway Marriott Hotel, Houston, TX, USA.
1. **Rattanasriampaipong, R.**, Kananithikorn, N., Keawmoon, N., and Prasongtham, P. (2014, April). *Causes of ballooning and lost circulation in Erawan and Satun fields.* Oral presentation at the Annual Meeting of Chevron Thailand Reservoir Management Forum, Renaissance Hotel, Bangkok, Thailand.

Mentoring

Organic Geochemistry Laboratory Mentor, Texas A&M University 2021–2023
Mentored **4** on-campus and visiting undergraduate students in sample preparation and laboratory techniques for archaeal lipid biomarker (GDGT) analysis using LC-MS. Responsibilities included:

- Freeze-drying and homogenizing marine mud samples from ocean drilling programs.
- Extracting total lipid extracts (TLE) using an Accelerated Solvent Extractor (ASE).
- Developing and optimizing ASE extraction methods.
- Purifying samples for LC-MS analysis via cellulose filtering and silica-gel column chromatography.

Geology Mentor, Chevron Thailand Exploration and Production Limited 2014–2015
Mentored **2** newly hired geologists in hydrocarbon exploration for a drilling project in the Gulf of Thailand. Responsibilities included:

- Interpreting wireline logs and performing stratigraphic correlation.
- Conducting pore pressure prediction and well design analysis.
- Supporting safe and efficient drilling operations.

Awards & Honors

Scholarships

Texas A&M Oceanography Graduate Scholarship 2018–2024
Chevron Thailand Graduate Scholarship 2015–2016
Chevron Undergraduate Scholarship 2012–2013
Mitsui Oil Exploration Company (MOECO) Undergraduate Scholarship 2011–2013

Honors

Invited Student Speaker, Annual AGU Student Travel Grant Luncheon, AGU Fall Meeting, Chicago, IL, December 12, 2022.
Invited Student Speaker, Award Recognition Ceremony, Ministry of Foreign Affairs, Bangkok, June 6, 2018.
Champion, The Hitachi Trophy 2013 Senior Project Competition – First place in Physical Sciences category, Faculty of Science, Chulalongkorn University, April 2013.

Travel Grants

FAS Research and Academic Exchange, Faculty of Arts and Sciences, Harvard University 10/2024
Fall Meeting Student Travel Grant, American Geophysical Union (AGU) 12/2022
Oceanography Graduate Council (OGC) Mini-Grant, TAMU Oceanography 12/2019, 12/2021, 12/2022
TAMU Research and Presentation Award, Graduate and Professional School (GPS), TAMU 12/2019

Synergistic Activities (Services & Leadership)

Manuscript Reviewer **15 reviews for 11 papers**
Reviewed for: *Chemical Geology (2), Frontiers in Marine Science (2), Folia Microbiologic (1), Geochimica et Cosmochimica Acta (2), Geophysical Research Letters (2), Nature Geoscience (1), Organic Geochemistry (1), Paleoceanography and Paleoclimatology (3), Science Advances (1).*

Session Co-Convener and Co-Chair, AGU Fall Meeting 2022–Present

- Organized and chaired the session *Past Climates and Environments of Southeast Asia and the Indo-Pacific (PaleoSEA)* in the Paleoclimatology and Paleoceanography (PP) section.

Discussion Leader, Gordon Research Seminar on Organic Geochemistry *July 27, 2024*
Led the keynote session *Disciplinary Integrations with Organic Geochemistry* at the 2024 Gordon Research Seminar.

Co-Author, Open Letter to NSF on U.S. Scientific Ocean Drilling *July 8, 2022*

- Co-authored a letter advocating for continued NSF funding of U.S. Scientific Ocean Drilling (SciOD).
- Signed by 208 Early Career Researchers from 98 institutions across 17 countries.

Graduate Student Senator, Texas A&M University 2018–2022
Co-Author, GPSG Resolution on Decarbonization and Fossil Fuel Divestment *April 21, 2020*

- Co-authored GPSG.R.53.05, advocating for TAMU to reduce fossil fuel investments.
- Passed by the Graduate and Professional Student Government (GPSG) Senate.

Treasurer, Fulbright Students' Association, Texas A&M University 2019–2020
Tour Docent, R/V *Sally Ride*, AGU Fall Meeting *December 11, 2019*
Board Member, Fulbright Students' Association, Texas A&M University 2018–2019
Geology Undergraduate Student President, Chulalongkorn University 2012–2013

Outreach

Press and Media Coverage

Interviewed Articles in English

1. **Brave the World** – Stories of Fulbrighters' Impact, 70^{th} Anniversary of the Fulbright Program in Thailand. *Fulbright Thailand, December 24, 2021.* [Online Article]

Interviewed Articles in Thai

5. **Learn Plearn Plearn by PTip Podcast** – Episode 190. *Fulbright Thailand, January 23, 2024.* [Podcast]
4. **Talk with Fulbrighter: Ronnakrit Rattanasriampaipong** *Fulbright Thailand, May 18, 2022.* [Online Article]
3. **Recommended Field of Study: Paleoclimatology/Paleoceanography** *Fulbright Thailand, December 8, 2021.* [Online Article]
2. **Fulbright in My View** – Fulbright Experiences. *Fulbright Thailand, October 6, 2021.* [Online Article]
1. **A Journey Without a Map** *The Science Scholars Facebook Page, June 16, 2020.* [Online Article]

Panel Discussions in Thai

3. **Fulbright Thai Graduate Scholarship (TGS): More Than Just a Scholarship** – Virtual Event. *Fulbright Thailand, February 17, 2023.* [Recording]
2. **Meet the Fulbrighter Series: Study Pure & Applied Science in the U.S.** – Virtual Event. *Fulbright Thailand, March 31, 2021.* [Recording]
1. **Meet the Fulbrighter Series: Doctoral Studies in the U.S.** – Virtual Event. *Fulbright Thailand, March 5, 2021.* [Recording]

Workshops

Professional Development

Lab Visit, Lab for Molecular Biogeochemistry and Organic Geochemistry (Pearson Lab), Harvard University, Cambridge, MA *October 24–30, 2024* Hands-on experience with the Spooling-Wire Microcombustion device interfaced with an Isotope-Ratio Mass Spectrometer (SWiM-IRMS) under the guidance of Dr. Ann Pearson and PhD student Amanda Calhoun.

NOAA Climate & Global Change Summer Institute, Holiday Inn, Steamboat, CO *July 14–19, 2024*

Paleoclimate Data Assimilation Workshop, The University of Arizona, Tucson, AZ *October 18–21, 2022*

PaleoCAMP 2022 Summer School, Heising-Simons Foundation, Sierra Nevada Aquatic Research Laboratory (SNARL), Mammoth Lakes, CA — *July 11–22, 2022*
Selected as 1 of 25 attendees from 132 applicants.

Science Mission Requirements (SMR) Workshop, NSF/USSSP-IODP, Chicago, IL — *May 17–18, 2022*

LinkedEarth PaleoHackathon 2, Virtual Python Workshop — *October 28–29, 2021*

G.R.A.D. Aggies Professional Development Program — Texas A&M University

NSF: The Agency, Proposal Preparation & Review — *February 19, 2020*

Open Educational Resources Workshop — *September 13, 2019*

Creating a Life of Balance & Wellness — *September 10, 2019*

Foreign Fulbright Student Program

Innovations in Civic Engagement: Harnessing Data for the Public Good, Philadelphia, PA — *March 7–10, 2019*

Pre-Academic Orientation Program, Ohio University, Athens, OH — *July 28–August 18, 2018*

Chevron In-House Training (Energy Company Technology)

Reservoir Geophysics — *November 21–25, 2017*

Applied Concepts of Structural Geology — *June 12–16, 2017*

Stratigraphic Analysis of Shallow Marine and Fluvial Reservoirs — *May 29–June 2, 2017*

Interpretation of 3D Seismic Data — *November 14–17, 2016*

Basic Reservoir Engineering — *December 15–19, 2014*

Formation Evaluation (Fundamentals) — *October 6–9, 2014*

Applied Stratigraphic Concepts — *August 4–8, 2014*

Applied Subsurface Geological Mapping — *June 23–27, 2014*

Applied Petroleum Geochemistry — *April 21–24, 2014*

Professional Societies

Student Member, American Geophysical Union (AGU) — 2018–Present
Student Member, American Association for the Advancement of Science (AAAS) — 2019–2023
Student Member, American Association of Petroleum Geologists (AAPG) — 2013–2023
Secretary, Thailand Society of Exploration Geophysicists (TSEG) — 2015–2016
Student Member, Society of Petroleum Engineers (SPE) — 2010–2013

Skills & (Computational) Languages

Languages: Thai (Native), English (Full professional proficiency)
Documentation and Artworks: MS Office Suites, LaTeX (Overleaf), Adobe Illustrator, Inkscape
Data Analytics and Visualizations: Python, MATLAB, ArcGIS, QGIS, Tableau, and Spotfire

Personal Interests

Science communication, Infographics, Data visualization, Marathon and ultra-distance running