Jo Martin

Education

2018–2020 (expected) MS in Mathematics, University of Vermont, GPA: 4.00.

Thesis: Extremal Values of Guessing Numbers of Graphs/ Advisor: Puck Rombach, Ph.D.

2012–2016 BA in Geology, Oberlin College, GPA: 3.73, Major GPA: 3.91.

Honors: Phi Beta Kappa, Sigma Xi, The George B. Wharton Prize In Geology

Experience

Research

August 2019–Present Guessing Numbers of Graphs, University of Vermont, Burlington, VT, Supervisor: Puck

Rombach, Ph.D..

Summer 2015 Geologic Mapping of Putative Paleolake Deposits in a Coprates Catena, Mars,

January 2016 Laboratory for Atmospheric and Space Physics, Boulder, CO, Supervisor: Brian Hynek, Ph.D..

June 2014–August 2016 Undergraduate Research in Geomorphology, Oberlin College, Oberlin, OH, Supervisor:

Amanda Schmidt, Ph.D..

Oberlin College

January 2015 Paleomagnetism of the Samial Ophiolite in Oman, Oberlin College, Oberlin, OH, Su-

pervisor: Andrew Horst, Ph.D..

Teaching

2018–Present **Graduate Teaching Assistant**, *University of Vermont*, Burlington, VT.

o GEOL 007 (Earth Hazards), Spring 2020

 GEOL 001 (Introductory Geology), Fall 2018, Spring 2019, Fall 2019: independently instructed 2-3 lab sections.

2016-2018 Instructor, Oberlin College, Oberlin, OH, .

o GIS for Natural and Social Sciences, Winter 2017, Winter 2019

• The Art of Data Visualization, Spring 2016, Spring 2017, Spring 2018

2016-2018 Teaching Assistant, Oberlin College, Oberlin, OH, .

o GEOL 235 (Applied GIS), Fall 2016, Fall 2017

2014 Undergraduate Teaching Assistant, Oberlin College, Oberlin, OH, .

o GEOL 235 (Applied GIS), Fall 2014

o GIS for Natural and Social Sciences, January 2014

2016 Tutor, Oberlin College, Oberlin, OH, .

o Applied GIS, Fall 2015

o Mulitvariable Calculus, Spring 2016

Earth Surface Processes, Spring 2016

Fall 2013 Computer Science Lab Helper, Oberlin College, Oberlin, OH, .

CSCI 150 & 151 (Intro to Computer Science and Algorithms)

Journal Publications

D. Pennington, I. Ebert-Uphoff, N. Freed, **J. R. Martin**, and S. A. Pierce, "Bridging sustainability science, earth science, and data science through interdisciplinary education," *Sustainability Science*, pp. 1–15, 2019.

Abstracts

- A. J. Schmidt, P. R. Bierman, V. Sosa-Gonzalez, T. B. Neilson, D. H. Rood, **J. R. Martin**, and M. Hill, "Agricultural land use doubled sediment yield in western china's rivers," in *AGU Fall Meeting Abstracts*, 2017.
- A. J. Horst, S. Trutner, E. S. Hartley, and **J. R. Martin**, "New paleomagnetic data from upper gabbros supports limited rotation of central semail massif in oman ophiolite," in *AGU Fall Meeting Abstracts*, 2017.
- **J. R. Martin** and A. H. Schmidt, "Teaching python scripting through arcgis," in *Geological Society of America Abstracts with Programs*, vol. 49, 2017.
- A. J. Horst, S. Trutner, E. S. Hartley, and **J. R. Martin**, "Development of foliations in uppermost gabbros in the oman ophiolite and implications for crustal accretion along a paleoridge axis," in *Geological Society of America Abstracts with Programs*, vol. 48, 2016.
- **J. R. Martin**, B. M. Hynek, and M. Chojnacki, "Geologic mapping of putative paleolake deposits in a Coprates catena, Mars," in *Lunar and Planetary Science Conference*, vol. 47, 2016, p. 2625.
- M. Chojnacki, B. M. Hynek, S. R. Black, R. Hoover, and **J. R. Martin**, "Geologic mapping of the Coprates Chasma (MTM-15057), Mars: Year 2," in *Lunar and Planetary Science Conference*, vol. 47, 2016, p. 2828.
- **J. R. Martin**, D. Lawrence, A. H. Schmidt, P. Bierman, V. Sosa-Gonzalez, A. Singleton, and Y. Qui, "Examining land use and erosion in southwest China," in *Geological Society of America Abstracts with Programs*, vol. 47, 2015, p. 515.
- B. M. Hynek, M. Chojnacki, S. R. Black, and **J. R. Martin**, "Geologoic mapping of the Coprates Chasma (MTM-15057), Mars: Year 1," in *Abstracts of the Annual Meeting of Planetary Geologic Mappers*, 2015.
- G. Garcia Greco, D. Fialo, T. B. Neilson, **J. R. Martin**, R. Wei, C. Zhang, and C. Liang, "Determining sediment sources and sinks in a small headwater watershed in Yunnan, China using short-lived radionuclides," in *Geological Society of America Abstracts with Programs*, vol. 46, 2014, p. 800.

Other Publications

- **J. R. Martin** and A. H. Schmidt, "Lab 3: Changes to the green river," in *On the Cutting Edge Peer Reviewed Teaching Activities Collection*, 2017.
- —, "Lab 4: Hurricanes," in *On the Cutting Edge Peer Reviewed Activites Teaching Collection*, 2017.
- —, "Lab 5: Sea level rise," in *On the Cutting Edge Peer Reviewed Activites Teaching Collection*, 2017.
- ——, "Differences and similarities between mean local relief and slope," in *On the Cutting Edge Peer Reviewed Activites Teaching Collection*, 2017.
- ——, "Lab 7: Hawai'i," in *On the Cutting Edge Peer Reviewed Activites Teaching Collection*, 2017.

—, "Lab 8: Lidar," in *On the Cutting Edge Peer Reviewed Activites Teaching Collection*, 2017.

Conference Activity

Sessions Organized

2018 Educating the Next Generation of Scientists: Interdisciplinary Education Bridging Geoscience and Data Science, American Geophysical Union Fall Meeting 2018, Washington, DC, 14 December 2018.

Co-convened a session of talks and a session of posters.

Talks Given

2017 **Teaching Python Scripting Through ArcGIS**, Geological Society of America Northeast/North central Section Meeting, Pittsburgh, PA, 19 March 2017.

Posters Presented

- 2018 **IS-GEO** A Research Coordination Network on Intelligent Systems Research to Support the Geosciences, *EarthCube 2018 All Hands Meeting*, Alexandria, VA, 7 June 2018.
- 2017 **Teaching Python Scripting to the Next Generation of Geoscientists**, *EarthCube 2017 All Hands Meeting*, Seattle, WA, 8 June 2017.
- 2016 **Geologic mapping of putative paleolake deposits in a Coprates catena, Mars**, *Lunar and Planetary Science Conference*, The Woodlands, TX, 22 March 2016.
- 2015 **Examining land use and erosion in southwest China**, *Geological Society of America Annual Meeting*, Baltimore, MD, 3 November 2015.

Workshops

July 2017 2017 IS-GEO Summer Institute, Texas Advanced Computing Center, Austin, TX.

August 2018 2018 IS-GEO Summer Institute, University of Hawai'i at Hilo, Hilo, HI.