Anna Urso

Curriculum Vita (revised: September 2018)

Current Position: Coastal Wetlands Technician The Nature Conservancy Lansing, MI 48906 (248)835-3009 annaurso92@gmail.com

Education

Bachelor of Arts, Environmental Geoscience

DEPAUW UNIVERSITY, Greencastle, Indiana

- 3.58 Cumulative GPA
- Awards: Faculty Distinguished Scholar, Dr. Charles Leonard Bieber Award in Geoscience
- Study Abroad: UNIVERSITY OF EDINBURGH, Scotland

Master of Music, Viola Performance

UNIVERSITY OF ARIZONA, Tucson, Arizona

• 4.0 Cumulative GPA

Bachelor of Music, Viola Performance

DEPAUW UNIVERSITY, Greencastle, Indiana

- 3.58 Cumulative GPA •
- Faculty Distinguished Music Performance Award •

Environmental Honors Fellow: Sustainable Design

DEPAUW UNIVERSITY, Greencastle, Indiana

- Led and developed a year-long program curriculum focused on topics in environmentally sustainable design
- Organized colloquiums featuring environmental speakers including Jane Goodall and Sandra Steingraber
- Engaged campus faculty and students in debates and panels discussing environmental topics including hydraulic fracturing, public transportation, and composting

Field Camp: Geology of New Zealand

DEPAUW UNIVERSITY, New Zealand

Identified and mapped the many geologic processes, including active volcanoes, fault lines, and glaciers, occurring in New Zealand over a faculty-led trip across both north and south islands

Coursework

Biology: Wildlife Ecology Conservation and Management, Conservation Biology, Ecology and Evolution, Working with Ecological Data in R

Environmental Science: Sociological Perspectives on Sustainable Development, Environmental Ethics, Climate Change Seminar, Weather and Climate Change, Energy and the Environment

Geology: Environmental Geology, Applied Hydrogeology, Sedimentology and Stratigraphy, Structural Geology, Mineralogy, Paleontology, Mediterranean Archaeology

Music: Pedagogy, Ethnomusicology, Composition, Symphonic Literature, Latin American Music, Western Music History, NYC Music History, Jazz History, Theory and Musicianship

Programming/Software Experience

- R, Python, SQL, IDL, Bash
- ArcGIS, ENVI

August 2010-May 2015

August 2012-May 2015

August 2016-present

January 2013

August 2010-May 2015

Coastal Wetlands Technician, Blue Accounting

Research Experience

THE NATURE CONSERVANCY, Lansing, MI

Sonoran Pronghorn Research Intern

- Recommend Great Lakes basin-wide conservation target values and goals to the Coastal Assembly through summaries and reports of existing ecological studies in the Great Lakes basin
- Compile, analyze, and map in ArcGIS ecological metric data sets to be displayed on Blue Accounting's interactive map tool

UNIVE	RSITY OF ARIZONA, Tucson, AZ
•	Analyzing behavioral trends of Sonoran Pronghorn in response to vehicular traffic for conservation efforts
٠	Classifying wildlife species with R from images collected at the Cabeza Prieta National Wildlife Refuge
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Installation and data collection of camera traps at the Santa Rita Experimental Range

HiRISE Planetary Geology Technician, Lunar and Planetary Laboratory August 2015-present

UNIVERSITY OF ARIZONA, Tucson, Arizona

- Researching active aeolian processes on Mars funded by NASA's Mars Data Analysis Program as a part of the High Resolution Imaging Science Experiment (HiRISE) mission
- Lead projects analyzing crater statistics and abrasion rates to determine rock feature formation times •
- Manage the HiRISE photogrammetry laboratory output, image requests, and public data releases to the Planetary Data System

Planetary Geology Research Intern, U.S. Geological Survey June 2015-April 2016

U.S. GEOLOGICAL SURVEY: ASTROGEOLOGY SCIENCE CENTER, Flagstaff, Arizona

• Identified and assisted in mapping of putative mud volcanos and rifting zones on Mars

NASA Planetary Geology and Geophysics Undergraduate Researcher

UNIVERSITY OF ARIZONA, Tucson, Arizona

Mapped the location of geologic structures within the equatorial region of Mars using ArcGIS and observations from HiRISE, a camera on board the Mars Reconnaissance Orbiter

Mineralogical Research Technician	June 2014-July 2014

UNIVERSITY OF NEVADA, Las Vegas, Nevada

Collected morphological and compositional data of naturally occurring asbestos in Southern Nevada using a Scanning Election Microscope as a part of an ongoing public health risk assessment

Peer-Reviewed Journal Publications

- Urso, A., M. Chojnacki, D. Vaz. (2018). Dune-yardang interactions in Becquerel crater, Mars. Journal of Geophysical Research: Planets.
- Chojnacki, M., M. Banks, A. Urso. (2018). Wind-driven erosion and exposure potential at Mars 2020 Rover candidate landing sites. Journal of Geophysical Research: Planets.
- Dundas, C., A. McEwen, M. Chojnacki, M. Milazzo, S. Byrne, J. McElwaine, A. Urso. (2017). Granular flows at Recurring Slope Lineae on Mars indicate a limited role for liquid water. Nature Geoscience, 10, 903-907.
- Chojnacki, M., A. Urso, L. K. Fenton, T. I. Michaels. (2017). Aeolian dune sediment flux heterogeneity in Meridiani Planum, Mars. Aeolian Research, 26, 73-88.
- Chojnacki, M., A. McEwen, C. Dundas, L. Ojha, A. Urso, S. Sutton. (2016). Geologic context of recurring slope lineae in Melas and Coprates Chasmata, Mars. Journal of Geophysical Research-Planets, 121(7), 1204-1231.

Conference Presentations

Urso, A., M. Chojnacki, A. McEwen, C. Dundas. (2017). Ripple-like features on recurring slope lineae (RSL) fans in Valles Marineris, Mars. Fifth International Planetary Dunes Workshop, St. George, Utah.

August 2018-present

August 2017-August 2018

June 2015-July 2015

Urso, A., M. Chojnacki. (2016). Dune-yardang interactions in Becquerel crater, Mars. 47th Lunar and Planetary Science Conference, The Woodlands, Texas.

Urso, A., C. Okubo. (2015). Cataloging Common Sedimentary and Deformation Features in Valles Marineris. American Geophysical Union Fall Meeting, San Francisco, California.

Awarded Grants

- NASA Mars Data Analysis Program Grant (2017) assisted with proposal
- Frank W. Howes Student Summer Grant (2014)

Outreach and Volunteer Experience

Borderlands Volunteer January 2017-August 2018 Sierra Club, Borderlands Team Research soundscapes along the US-Mexico border as a method of examining anthropological effects on local ecology and assessing noise pollution in protected wildlife refuges Map wildlife corridors in southern Arizona around major roads and the US-Mexico border • Animal Care, Rehabilitation, and Rescue Aid June 2016-June 2018 Tucson Wildlife Center Inc. • Assist the education director with presentations during outreach programs at local schools Responsible for the care and wellness assessments of injured or orphaned animals • Conflict-Free Minerals Campus Initiative Leader for DePauw University May 2013-May 2015 The ENOUGH PROJECT, Raise Hope for Congo Raised awareness of conflict-mineral-driven violence in the Democratic Republic of the Congo • Worked with DePauw University staff and trustees to write and implement conflict-mineral-free • procurement policies Sustainable Design: Applications in Renewable & Reusable Energy January 2012 Ghost Ranch New Mexico, Abiquiu, New Mexico Gained hands-on experience with implementing renewable energy including solar, wind and water power • Reconstructed a farm office building to include solar modules and a thermal heater • • Led renewable energy demonstrations for local school children Fundraising Committee Leader January 2012-May 2013 Mu Phi Epsilon, Professional Music Fraternity Led collaborations with local restaurants, small businesses, and the county museum to raise money through • sales and silent auctions for MPE's music education and scholarship fund Fundraising Chair March 2012-March 2013 Alpha Chi Omega, Social Fraternity Recruited sponsors for our annual Relay for Life team

• Organized campus-wide events, such as the *Walk a Mile in Her Shoes* relay, to provide funding for a local family crisis shelter for victims of domestic violence

Teaching Experience

Private Music Instructor

Self-Employed

• Tutor students of all ages in music theory and musicianship on viola, violin, and piano

Quantitative Reasoning Tutor

DEPAUW UNIVERSITY, Greencastle, Indiana

• Tutored students at the Academic Resource Center in science and mathematics

January 2014-May 2015

June 2012-present