**Matthew Marcus**

2816 East Hawthorne St. Tucson, AZ 85716

267 751 9934 • matthew.marcus@temple.edu

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**EDUCATION**

**Temple University,** Philadelphia, PA. 2017—

 **Ph.D. in Geography and Urban Studies.** GPA: 3.9/4.0

 **Relevant Course Work:** Advanced Remote Sensing, Political Ecology of Climate Change and Security, Applied Statistics

and Data Science

**University of Pennsylvania,** Philadelphia, PA. 2014

 **MS in Applied Geosciences—Hydrogeology Concentration.** GPA: 3.81/4.0

**Relevant Course Work** Hydrology, Ground Water Hydrology, Surficial Geology (Environmental and Engineering Geology of soils), Geophysics, Aqueous Geochemistry, Wetland Ecology, Sustainable Development of Water Resource Systems, Structural Geology

**Capstone:** Researched efficacy of geophysical techniques for locating abandoned oil wells

**Dickinson College,** Carlisle, PA. 2011

 BA **International Studies** Minor: **Environmental Studies.** GPA: 3.43/4.0

**PROFESSIONAL EXPERIENCE**

**Ph. D. Student, Temple University Department of Geography and Urban Studies.** Philadelphia, PA 8/2017—

* Mapping environmental change in Pucallpa, Peru with remote sensing technologies to analyze patterns and drivers of deforestation in an Amazonian community
* Currently conducting a study on wetland degradation in the Peruvian Amazon using remote sensing technologies and field work to understand how human activities are impacting a critical ecosystem
* Instructor of Record for an introductory environmental studies course that explores themes of environmental and human geography. Responsible for creating lectures

**Hydrogeologist, GHD.** Exton, PA 8/2015—5/2017

* Analyze groundwater data concerning contaminants and aquifer parameters
* Lead and organize field work at two Sunoco sites: Philadelphia Energy Solutions and Marcus Hook Industrial Complex
	+ Plan logistics of field work operations at complex sites
* Conduct field work, such as ground water and soil sampling in a safe and scientifically sound manner

**Staff Scientist, The Intelligence Group.** Bedminster, NJ 5/2015—7/2015

* Researched history of contamination/industrial activity at superfund sites such as Portland Oregon Harbor

**Project Manager, Philadelphia Global Water Initiative.** Philadelphia, PA 9/2013—5/2014

* Managed communication outreach via social media to inform public of events
* Oversaw delegation of responsibilities during transition period of growth and rebranding
* Coordinated student volunteers, assisted in planning conference on water justice

**Teacher Assistant, Intro-geology course. University of Pennsylvania, Earth and Environmental Science.** Philadelphia, PA 2013

* Communicated geologic concepts of natural hazards (volcanoes, earthquakes, etc.) to non-majors in large groups and private sessions

**SKILLS**

* GIS analysis and Remote Sensing
* R and Python coding languages
* Fluent in Spanish

**PRESENTATIONS AND PUBLICATIONS**

**Oral Presentation of Current Research at American Association of Geographers.** Virtual. 04/2021

* “Degradation of the Palm Swamps of the Peruvian Amazon: Harnessing The Power of Remote Sensing to Assess and Address a Looming Environmental Threat”
	+ Analyzed land cover change with remote sensing technologies of a critical ecosystem in the Peruvian Amazon.

**Oral Presentation of Research at American Association of Geographers.** Denver, CO. 04/2020

* “Oil palm driven land use change in the Peruvian Amazon”
	+ Statistically analyzed land-use change trends to explain how oil palm growth affects the use of space in Pucallpa, Peru

**Poster presentation at American Geophysical Union**. San Francisco, CA. 12/2019

* “Land-use Change in Four Landscapes in the Peruvian Amazon.”
	+ Utilized Landsat data to build a time-series analysis of land-use change in the deforestation hotspot of Pucallpa, Peru

**Primary Author for CIFOR Working Paper**

* Marcus, M. Gutierrez-Velez, V. H., Cronkleton, P. 2019. Land-use Change in Four Landscapes in the Peruvian Amazon. *Center for International Forestry Research.*

**Oral Presentation at American Association of Geographers.** New Orleans, LA. 04/2018

* Presented on using Landsat thermal band data to study the urban heat island effect in Philadelphia, PA