# Alexandra Buczek

# **Data Scientist**

Enthusiastic data scientist, skilled in research and communication. Experienced in utilizing Python and R to organize and clean data, run statistical analyses, and visualize results. Experienced professional in research and communication to both expert and general audiences.

## **Work History**

### 2016-09 -Current

## **PhD Candidate**

American Museum Of Natural History, New York, NY

- Cleaned and organized ecological abundance data (60 samples with 300+ species) using Python Pandas and NumPy
- Utilized ordination and statistical analyses in R and Python
- Visualized data and results using R ggplot2 and Python matplotlib and seaborn
- Employed Jupyter Notebooks for enhanced accessibility and sharing of coding pipelines
- Communicated methodology, results, and implications of research via presentations to the general public (1) and academic audiences (5) and published academic papers

## 2018-09 -2018-12

# **Adjunct Professor**

Hunter College, New York, NY

- Taught Introduction to Computer Science lab section, providing instruction to up to 30 undergraduate students
- Instructed students using discussions and demonstrations in Python and C++

## 2018-07 -2018-12

# **Teacher and Content Expert**

AMNH Lang Science Program, New York, NY

- Created lectures and planned learning activities to facilitate understanding of scientific method for up to 20 high school students
- Evaluated and revised lesson plans and course content to facilitate and moderate classroom discussions and student centered learning
- Enhanced student learning by optimizing wide range of instructional approaches and innovative classroom activities.
- Implemented and encouraged debate-style classroom environment to increase student engagement and promote critical thinking

## Education

2016-09 -Current

2016-05

Ph.D.: Comparative Biology

American Museum of Natural History - Richard Gilder Graduate

School - New York, NY
2012-09 - Bachelor of Science: 0

**Bachelor of Science: Geology-Biology** 

Brown University - Providence, RI

## Contact

#### **Address**

New York, NY, 10011

#### Phone

(860) 986-3805

#### E-mail

buczeka94@gmail.com

#### LinkedIn

https://www.linkedin.com/in/alex andra-buczek-4a27a

#### www

https://ajbuczek.github.io/

## Skills

**Data Cleaning** 

MS Office

Organization

Technical writing

reclinical writing

Data collection and analysis

Python

Data visualizations

Science Communication

Science Presentation

••••

## Languages

Spanish

Polish



## **Grants and Awards**

| 2017 – 2020 | NSF Graduate Research Fellowship               |
|-------------|--|
| 2016 - 2020 | RGGS Graduate Fellowship                       |
| 2018        | RGGS Sydney Anderson Travel Award              |
| 2017 – 2018 | AMNH Lerner Gray Memorial Fund                 |
| 2017 – 2018 | Paleontological Society Student Research Grant |
| 2017 – 2018 | GSA Graduate Student Research Grant Program    |
|             | •  |

# **Publications**

**Buczek, A. J.**, Hendy, A., Hopkins, M. & Sessa, J.A. (2020). On the Reconciliation of Biostratigraphy and Strontium-Isotope Stratigraphy of Three Southern Californian Plio-Pleistocene Formations. Accepted for Publication, March 2020: *GSA Bulletins*.

Velazco, P. M., **Buczek, A. J.,** & Novacek, M. J. (2017). Two New Tritylodontids (Synapsida, Cynodontia, Mammaliamorpha) from the Upper Jurassic, Southwestern Mongolia. *American Museum Novitates*, *3874*(3874), 1–35. http://doi.org/10.1206/3874.1