

University of Arizona

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Researcher, Science communicator, Aspiring data scientist

Skills

Programming

R, Python, Bash

Data Science

 $Machine\ Learning,\ statistics,\ Bayes,\ data\ mining,\ visualization,\ geospatial\ analysis,\ Tidyverse,\ Pandas,$

SCIKIT-LEARN

Version Control

Git, GitHub

Software

LINUX, DOCKER, JUPYTER NOTEBOOKS

Education

University of Arizona Tucson, AZ

Master of Science - Information Fall 2020 - Fall 2021 (expected)

• GPA: NA

University of Arizona Tucson, AZ

Master of Science - Ecology and Evolutionary Biology Spring 2020 (expected)

• GPA: 3.784

University of Wisconsin - La Crosse

La Crosse, WI

Bachelor of Science - Biology, minor: Psychology 2017

• GPA: 3.78

Research_

University of Arizona

Unlocking big data for biodiversity research

MACHINE LEARNING, SPECIES DISTRIBUTION MODELS, COMMUNITY SCIENCE 2019

Begonia intersexual floral mimicry

SIGNAL DETECTION THEORY, LEARNING 2017 - 2019

Bioacoustics of floral sonication by bees

VIBROMETRY, FLORAL SONICATION 2017

University of Wisconsin - La Crosse

Honey bee sleep

SLEEP STAGES, INFRARED VIDEOGRAPHY, BEEKEEPING 2016 - 2017

Teaching

UA Science: Sky School Tucson, AZ

INSTRUCTOR 2019 - present

• Lead K-12 students in inquiry-based science programs and supervise groups of students' research projects. Explain technical content at different levels. Rapidly adapt to students' needs and interests. First instructor to design coding activities.

University of Wisconsin - La Crosse

La Crosse, WI

BIOLOGY TUTOR 2014 - 2017

Improved college students' academic success by tutoring concepts, writing, presentations, data analysis, group work, study techniques. Promoted self-directed learning skills.

GRADUATE INSTRUCTOR

EVOLUTION 2019 - 2020

· Lead two weekly discussions, engage students with active learning style

ECOLOGY 2019

• Supervise field experiments, lead two weekly labs

ANIMAL BEHAVIOR 2017 - 2018

• Designed lab curriculum alongside primary instructor, created original lab activities

Introductory Biology Lab 2018

· Lead two weekly labs

Workshops_

CONTRIBUTED

UA Data Science Institute

SOFTWARE CARPENTRY WORKSHOP February, 2020

• Volunteer helper; Git, Bash, Python, Jupyter Notebooks

ATTENDED

University of Arizona Libraries

Intro to Python September - December 2019

· Twice-weekly Python programming course

Botany 2019 Conference

USING DIGITIZED HERBARIUM DATA IN RESEARCH

July, 2019

• R programming for statistical modeling and geospatial analysis with biodiversity data

UA Data Science Institute

Data Carpentry Workshop May, 2019

· Bash, R, cloud computing, data wrangling

Relevant Coursework

PROGRAMMING

Data Mining and Discovery (currently enrolled)

Statistical Natural Language Processing (currently enrolled)

R Programming (A)

Intro to Modeling in Biology (A)

MATH AND STATISTICS

Ecological Forecasting (A)

Elementary Statistics (A)

Quantitative Methods in Ecology (A)

AP Calculus (A)

Precalculus (A)

Awards

American Museum of Natural History

Travel Scholarship \$600 2019

Tucson Bee Collaborative

Travel Scholarship \$690	2019
Society for Ecological Restoration - Southwest	
Campus Pollinator Garden \$300	2019
UA Graduate & Professional Student Council	
CONFERENCE TRAVEL \$750	2018
University of Arizona	
RESEARCH STIPEND \$2,500	2017
University of Wisconsin - La Crosse	
Undergraduate Research And Creativity Grant \$2,000	2016
University of Wisconsin - La Crosse	
Dean's Distinguished Fellowship \$4,000	2016

Publications_____

Russell, A.L., Kikuchi, D.W., **Giebink, N.W.**, & D.R. Papaj. (2020). Sensory bias and signal detection tradeoffs maintain intersexual floral mimicry. Philosophical Transactions B special issue.

De Luca, P. A., **Giebink, N.**, Mason, A. C., Papaj, D., & Buchmann, S. L. (2018). How well do acoustic recordings characterize properties of bee (Anthophila) floral sonication vibrations? Bioacoustics, 1–14.