# JACOB PETERSON

I am a trained ecologist with experience working in both ESRI and opensource GIS platforms. Through my academic pursuits, I have also gained considerable experience in a variety of statistical methodologies. I enjoy exploring datasets and solving the puzzle that comes with analysis and getting the data to answer useful questions.

I am currently looking for a data science position that allows me to visualize and solve pragmatic problems using my skills in GIS and statistical analysis.



## **EDUCATION**

Present 2020

# M.Sc., Applied Statistics and Analytics

University of Kansas Medical Center

Overland Park, KS

· Emphasis: Data Science

2018 2016

#### M.Sc., Natural Resources Ecology and Management

Oklahoma State University

Stillwater, OK

- · Thesis: Examined the effects of the Conservation Reserve Program and anthropogenic structures on the long-distance movements of Tympanuchus pallidicinctus
- · Experience applying mixed-effect regression models and a variety of spatial movement and selection models.
- · Authored publications for peer-reviewed journals.

2015 2012

#### B.S., Fish, Wildlife and Conservation Biology

Colorado State University

• Fort Collins, CO

· Minor: Spatial Information Management (SIM)



## RELEVANT EXPERIENCE

2019

#### Research Assistant

**Purdue University** 

- West Lafayette, IN
- · Began development of an agent-based model to estimate the effectiveness of chronic wasting disease management methods on Odocoileus virginianus
- · Continued education by taking graduate level coursework in statistics and data science

2019 2016

#### **Student Consultant**

Oklahoma State University and Purdue University

- · Worked unnoffically as a consultant for GIS and R within my graduate school departments helping other students, post docs, and research staff improve their R programming skills, tidy data and manage data with unit tests, and perform statistical and spatial analyses.
- · I have led help sessions one on one, within small working groups, and given detailed presentations about new techniques to lab research groups and graduate level classes.

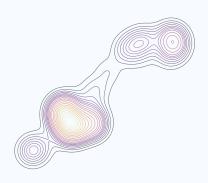
2016 2015

#### Field Technician - White-tailed Deer Capture

Missouri Department of Conservation

• Rea. MO

- · Assisted in the capture and tagging of adult and neonate deer.
- · Used VHF and Iridium GPS telemetry to monitor individual survival and movement patterns.



## CONTACT

github.com/jacpete

**J** +1 (913) 449-1623

#### SKILLS

Highly experienced with

R Program R

ArcGIS

∆ Linux/Bash

MI R Markdown

Experience with

Pvthon

°¹ SOI

**Q** QGIS

Netlogo

# PROFESSIONAL COMMUNICATION

I have given talks about my graduate reserach at five professional conferences in the last two years. I currently have two scientific

articles up for peer-review in professional journals.

#### MORE INFO

See full CV at github.com/jacpete/Resume\_CV/ cv\_Peterson.pdf for more complete list of positions and experience.

Made w/ pagedown. Source code: github.com/jacpete/Resume\_CV. Last updated on 2020-01-01. Puman Dimensions Technician
Colorado Parks and Wildlife

Colorado Parks and Wildlife

Port Collins, CO

 Worked on a variety of interdisciplinary projects in social science and natural resources to create summary reports for survey data, literature reviews, statistical and spatial analysis of survey response data, and designed and managed Access and ESRI geodatabases.

## 2015 GIS & Human Dimensions Independent Study

Colorado Parks and Wildlife & Colorado State University

**♥** Fort Collins, CO

- · Began development of a method to spatially model and predict human attitudes and tolerance to black bears using survey response data.
- Experience using SQL to interface with a database and Python & R to script a spatially-explicit model.

# NSF - Research Experience for Undergraduates Fellow

University of Kansas

2015

2014

**Q** Lawrence, KS

• Used SQL and R to parse a 150 year-old fish stomach database to create a food web for the North Atlantic Ocean and test for correlation in these interspecific relationships with meta-population synchrony.

#### Field Technician - Mule Deer Neonate Capture

Colorado Parks and Wildlife

Piceance State Wildlife Area, CO

- · Assisted in the capture and tagging of neonate deer.
- Used VHF and Iridium GPS telemetry to monitor individual survival and assess cause of mortality.
- Predictive Model for Archeological Sites Affected by Flood Damage

  SIM Minor Capstone Project (CSU)

   Predictive Model for Archeological Sites Affected by Flood Damage

  Fort Collins, CO
  - Designed a predictive model to locate prehistoric and historic cultural archeological sites using spatial predictors with ArcGIS and python scripts.

## SPECIAL INTERESTS

Continued Learning - I am always in search of new methods, code libraries, and ideas that could increase the efficiency or statistical rigor of analysis.

Scientific communication - I enjoy explaining complex problems, statistical analyses, and their results to nonspecialists.

FOSS - I am an advocate of free and open source software solutions that are easily accessible for others to use and learn from.