

Software engineering assistant: Vulture project

Seeking a student with experience in software development to work on an R package used in animal behavior research. You would be working with Kaija, a second-year PhD student in the [Pinter-Wollman lab](#), in the Ecology & Evolutionary Biology department. This is a short-term summer position (~1 month), with possibility of extension.

Research background:

Our lab works with movement data collected from a population of [endangered vultures](#). We perform social network analysis on the data in R. I (Kaija) have written an R package to automate some data cleaning and analysis steps. As the lab uses the package more and more, I want to improve it and develop good tests for the code. I come from an ecology/evolution background, and I'm comparatively new to software development. I'd like to work with someone who has more experience on the software side of things to complement my skills.

Tasks:

This position will be primarily focused on **quality assurance testing**, including:

- Writing unit tests for existing functions.
- Developing an automated testing (CI/CD) pipeline (e.g. using GitHub Actions).
- Reviewing and improving the existing branch and version structure.

Depending on the experience and interests of the person hired, this position might also involve **software development**, including:

- Bug fixes, enhancements, and new features.
- Generalizing existing functions for use beyond the vulture project.
- Describing the package in a short publication targeted to a methods journal.

Qualifications:

Required:

- Experience with software development, especially unit testing.
- Experience writing code in R or a related language (e.g. Python, MATLAB).
- Experience using Git and GitHub.

Preferred:

- Comfort coding in R and using RStudio and [RStudio projects](#)
- Familiarity with the [tidyverse](#) packages, especially `dplyr`, `tidyr`, `purrr`, and `sf`.
- Experience with automated testing.
- Experience working on open-source software projects.
- Interest in animal behavior, biology, ecology, evolution, network science, or environmental science. (No specific background knowledge is required, but you'll enjoy the work more if you're interested in the topic.)

Other skills:

- Good communication and time-management.
- Ability to work independently, with regular check-ins.
- Good organization and detail-orientedness.

Position details:

- The pay starts around \$17 per hour, for approximately 10-20 hours per week (flexible).
- Short-term summer position (~1 month), with potential for extension.
- Schedule is very flexible. **Remote work from anywhere in the US is fine!** Must be able to meet regularly via Zoom during California business hours.

How to apply:

Email Kaija (kgahm@ucla.edu) with the subject line "Vulture project assistant application", and attach the following:

1. Your CV or resume
2. A document that briefly answers the following questions (no strict format requirements)
 - Why are you interested in this position?
 - What is your background and previous relevant experience?
 - What would make you a good candidate for this position?

The deadline to apply is **June 1, 2023**, but I will review applications until I have hired someone.

Feel free to email me with any questions about the position or the application process!