

SHANNON JOSLIN

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Dear Robert Grasso,

I am enthused to apply for the Biologist (Series Grade GS-0401-09) position for the Department of the Interior National Park Service in Yosemite National Park. I believe my experience managing large data collection projects, manipulating data, running analyses, and creating materials for others give me the requisite competencies to be successful in this position. In addition, I also have demonstrated abilities as an instructor and trainer focused on creating resources for biologists to increase their computational competency. I also have a passion for the outdoors and just completed writing and publishing, *Yosemite Bouldering: A guidebook to bouldering in Yosemite Valley*. In this position, I could bring all my skills and passions to bear working with contemporary and historical data by making it meaningful and useful for regional biologists and policy makers. I am excited for such an opportunity. Please let me provide a brief summary of my experience.

Data Collection: I have a strong background that makes me qualified for this position. My current position as a Conservation Population Geneticist Graduate Student Researcher at the University of California, Davis has provided me valuable experience working with endangered fish in California and large historical datasets. I am experienced in managing projects which unite big data from DNA sequencing with messy, field-collected wildlife data from a variety of sources and temporal scales in order to carry out population genetic analyses. In my work I used a combination of perl, Python, R and bash scripting to manipulate data and carry out my analyses. In my work writing *Yosemite Bouldering* I have experience in summarizing complex spatial data (location of boulders scattered throughout Yosemite) in a clear, concise manner so readers can easily navigate to the park's 26 bouldering areas and up 1,344 rock climbs. I created detailed maps, researched and wrote about Yosemite's park history, and included information on the ecology of the park.

Teaching: As a classically trained wet-lab geneticist, I came to grad school without any computational experience. Additionally, I was the first graduate student to use big data in my lab and taught myself countless command line softwares and multiple scripting languages. As other members of started to acquire bigger datasets, I gave seminars and created scripts to assist in their analyses. I sought to save other geneticists the same headaches, and my work as an Instructor with the Lab for Data Intensive Biology has afforded me the opportunity to have created a full course and dozens of tutorials on how to carry out biology on the computer. The lessons primarily focus on giving classically trained biologists the ability to work and engage in biology at the command line, which is currently not taught in formal college or graduate level curriculums. In order to create a resource for others all of the lessons are open-source and continually available on GitHub.

Personal Qualities: I am a self-motivated worker that is highly collaborative, and I do well in interdisciplinary or specialized teams. I have worked from home for over a year now and am accustomed to teleworking. I am a hardworking individual that deeply enjoys solving puzzles, simplifying complex processes and accurately transmitting information. I am independent, and I also work well as a team member or leader of projects. I believe my prior work shows that I have the skills for your position and demonstrates my ability to learn on the job, and love of the organisms of Yosemite, and it demonstrates that I am committed to continually pursuing high quality work.

Thank you in advance for your consideration of my application. I strongly believe I have a unique background to success in this position and look forward to the opportunity to discuss this with you in the future. I am happy to provide any additional material or references at your request.

Shannon EK Joslin