Shih-Ni Prim 3335 Leesville Towns Ct. Raleigh, NC 27613

Dear Hiring Manager,

I am writing to express my interest and qualifications for the position of PhD Intern—Computer Science. A second-year PhD student, I am currently enrolled in the Department of Statistics at North Carolina State University with a full-time status. My cumulative GPA as of today is 4.0. Interested in developing methods informed by applied research, I have been working on building a statistical model to find causal effects in spatial data, which can benefit environmental and climate research and, more broadly, any data with spatial correlation. As I start to think of real-world applications for my research, I have come to realize that I would like my future career to have positive impacts on the world, and I would like to be part of something larger than myself. As my career goals become clearer, I started exploring the various institutions I could work at and realized that a place like PNNL perfectly fits my personality, work style, values, and goals.

By summer 2024, I will have completed my coursework, including five core, fundamental statistical inference classes, three advanced theory and computation courses, and three electives. These classes give me a solid foundation to learn more advanced theory and develop new methods. Besides knowledge in statistical inference, I have strong coding skills, mainly in R and Python. I have also used SAS, Matlab, and Java, although much less frequently. I program almost daily, and my research project requires me to build models from scratch, using only the most basic packages or libraries. I have also done data analysis projects that require me to do data cleaning, exploratory data analysis, and regression analysis using ready-made packages.

Outside statistics and coding, I have other relevant research skills, including writing, editing, and presentation, largely resulted from my previous academic training in musicology. Having spent nearly a decade studying musicology (2007–2016) and now working in statistics, I am confident that I can bring a wide range of skills to any team I am assigned to and to assist with various stages of research. I am truly looking forward to working on multidisciplinary scientific investigation and development, which allows me to combine my statistical knowledge with previous training in the humanities.

In short, I am interested in continuing to combine Bayesian, spatio-temporal, and causal inference models to solve real world problems related to energy, environment, and climate, but I am also open to assisting with any research at PNNL. Projects such as Rapid Analytics for Disaster Response and GeoBOSS especially interest me. I am eager to learn from others and be part of a team that does meaningful and impactful research. I look forward to having a conversation with you on what I can contribute to Pacific Northwest National Laboratory.

Sincerely,

Shih-Ni Prim