Dr. Zhian N. Kamvar
17899 NW Sedgewick Ct
Beaverton, OR 97006
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To whom it may concern

I found this position on the rOpenSci slack channel via Kara Woo. After speaking with her about the nature of the job, I am confident that I will excel in this role. As you can see from my resumé, I have **more than 10 years of experience** collaborating with researchers to develop **robust and well-tested R packages** in the fields of population genetics, education, and epidemiology. Over the last 5 years, I have focused heavily on **using R in mission-critical live deployment contexts**, which makes me particularly fit for this role. Moreover, I am excited about this position because it would give me the opportunity to hone my skill set and I would have the opportunity to work with other developers in a fast-paced and challenging environment.

One project I am particularly proud of is The Carpentries Workbench[1], a suite of R packages designed to build, deploy, and audit **reproducible data science lessons** built with R Markdown in a **robust and platform indpendent** manner[2]. This was a ground-up redesign of the lesson infrastructure to focus on the needs and working practices of our diverse community of volunteers, allowing them to focus on the content of their lesson and not the tooling. This system, deployed in early 2023, is still in production today with no downtime and requires minimal maintenance. This was only possible because I was careful to ensure that it was **scalable and robust from the beginning** and had implemented layers of integration testing.

In my current role as a research software engineer at UMass, I work with a small team of developers to support collaborative modeling efforts for infectious disease forecasting using a framework of complex data standards and a suite of R packages for validation of model outputs. In my short tenure here, I used my knowledge of **CI/CD to significantly improve the deployment and testing context** for these tools to ensure quality and reliability. I also implemented a dashboard that would display forecast predictions and model evaluations with minimal setup, effort, and maintenance.

The experience I have gained over the last decade has given me the technical and practical experience needed to be a successful senior software engineer. With my expertise in software development, production, and communication, I am uniquely able to rapidly adapt to any situation and contribute to a collaborative and friendly culture of work. I have the skills required for this role, and am always excited about the challenge to turn complex analyses into well-tested production code. I would like to thank the recruitment team for consideration of my application.

Sincerely,

Zhian N. Kamvar, Ph. D.
(Attached: Resumé)

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[1]Workbench user manual: https://carpentries.github.io/workbench
[2]Workbench developer's guide: https://carpentries.github.io/workbench-dev/intro.html#sec-remote