

Dear hiring team,

I am hoping that my background in leveraging ML and statistics for scientific research, my increasing understanding of the cloud and industry through working at AWS, and my enthusiasm about the future of AI and our relationship with it, will be an exciting prospect for your interests.

During my PhD and postdoctoral research as an astrophysicist, I collaborated with students and professors at various institutions, led and participated in sharing research ideas, and gave presentations to technical and general audiences. I learned to be confident through rigorous testing and have been adaptive to new environments. I read on cutting-edge methods and understandings of complex topics, applied them to my research, and coded tools to explore/test/analyze data more efficiently.

At AWS, I was given the opportunity to learn about cloud infrastructure and various industry AI/ML needs. I also took a lead role in the development of AI-powered infrastructure tools that help technical writers effectively leverage LLMs. This work involved learning about evaluation frameworks, thinking on standardized testing methodologies, and creating/testing prompting techniques for templates and tutorials.

After leaving academia I wanted to make a positive impact on the world. What particularly excites me about data science and research roles is the opportunity to apply rigorous analytical methods to solve meaningful problems. My experience spans both cutting-edge research and practical implementation, positioning me well to:

- Design and evaluate complex ML models
- Build scalable data processing pipelines
- Implement sophisticated statistical analyses
- Drive innovation in ML/AI applications

I'm excited about applying my experience in helping to build our future. If given the opportunity, I would be happy to discuss how my skills could contribute to important work.

Thank you for your time.

Best regards,  
Matthew Fong

