Dear hiring team,

I am writing to express my strong interest in the data scientist position at Microsoft. With my expertise in machine learning, statistical analysis, and large-scale data processing, combined with my unique background spanning both academic research and industry at AWS, I believe I would be a valuable addition to your team.

During my PhD and postdoctoral research as an astrophysicist, I built ML end-to-end pipelines for processing terabyte-scale cosmological data, achieving significant improvements in analysis efficiency. I learned to be confident through rigorous testing and have been adaptive to new environments. I collaborated with students and professors at various institutions, led and participated in sharing research ideas, and gave presentations to technical and general audiences. This experience has honed my ability to tackle challenging technical problems and develop innovative solutions.

At AWS, I drove the model evaluation, fine-tuning, and prompt engineering initiatives in the development of an internal AI tool for technical documentation. I deepened my understanding of cloud solutions and gave presentations on AWS services. I discovered an inefficiency in the onboarding process, tested solutions, and worked across teams to implement improvements for nearly all of the new users onboarding to AWS using documentation.

What particularly draws me to Microsoft is its goal to build tools that enable everyone to do more, especially with the development of Copilot. I am excited about the opportunity to apply my expertise in data science, research, AWS, and AI to help drive innovation in understanding how we interact with Copilot.

Key achievements that align with your needs include:

- Designed and implemented ML framework for analyzing large-scale data using Python
- Built automated testing infrastructure achieving above 90% reliability in model validation
- Developed visualization tools, processing multiple large datasets containing above 8B+ data points, to identify patterns in massive astronomical datasets
- Lead role in development of an internal AI tool for technical documentation, specifically driving model evaluation, fine-tuning, and prompt engineering initiatives

I am passionate about leveraging data science and ML to solve meaningful problems, and I am excited about the possibility of contributing to Microsoft's mission. I would welcome the opportunity to discuss how my skills and experience align with your team's needs.

Thank you for considering my application.

Best regards,
Matthew Fong