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Dear Hiring Manager,

I write to introduce myself as an interested candidate for your available data science position. I think Airbnb provides an exciting opportunity for me to expand my skills as a data scientist. On a personal level, Airbnb has been a huge part of making me the person that I am today, and I hope that by joining your team I can help to impact the lives of others.

As a young (and poor) traveler in Europe in the early 2010s I relied on Airbnb to see much of what Europe has to offer. Through your platform I felt like I got to know the cities and cultures of each country that I visited better than I would have through any other traveling service. Trust between the visitor and host is central to the role Airbnb provides, and I think contributing to the security for both sides and making users' experience safer is a worthwhile goal I would be excited to work toward with Airbnb.

In my coursework at the University of Iowa I have focused on applied statistics to address a wide variety of problems posed by observational data types such as: time series, spatial, network, survival, and multi-level data. In each of these topics I have a deep understanding of the models and experience estimating and interpreting them. I have taken advantage of my time as a graduate student to take classes from experts on these methodologies and to use these tools in my own budding research projects. This allows me both an academic understanding and practical experience in using these models. Furthermore, my background here allows me to quickly pick up new methods.

As a research assistant I have gained invaluable experience working in a team setting and under time constraints. One example is when Dr. Elizabeth Menninga requested that I write a function to bootstrap a social network to quantify uncertainty of network statistics. In my role I added value by not only writing the function, but improving it by suggesting that bootstrapped network ties should be conditional on certain observed characteristics, depending on the type of network. This project will ultimately be widely applicable to the network analysis community.

In one recent web scraping project I gathered, cleaned, and analyzed more than 5,000 comments from an online white supremacist forum. Before starting this project I had no experience with web scraping and within a few hours I was able to teach myself to scrape an entire forum. I turned this data gathering project into a blog post on my website in which I do exploratory analysis of long-term forum activity, sentiment analysis, and topic modeling. This project serves as one example of my versatility as a data scientist because of my ability to learn new skills quickly.

I am most proficient in R and Stata, and have experience in Python and SQL as well. In addition to these abilities, I think joining your data science team gives me a great opportunity to grow and learn as a thinker, data scientist, and coder.

I thank you for your time and consideration, and I look forward to an opportunity to learn more about the position and the work done at Airbnb.

Sincerely,
Christopher Junk