Andrew (Seongbae) Kim
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Dear Hiring Manager,

I am a recent graduate from the University of Texas at Austin and received a Bachelor of Science in Mathematics with a minor Computer Science. While attending UT Austin, I was able to complete courses in Computer Science including Computer Architecture, Data Structure and Algorithm, Computer Graphics, Software Engineering, and Neural Network, as well as coursework in Mathematics including Probability, Applied Statistics, and Stochastic Process. I was also able to complete undergraduate research courses in machine learning. After reviewing your positing, I believe I am a good fit and would love an opportunity to work with you and your team.

Since I started college at UT Austin, I participated in the Undergraduate Research program where I served as an Undergraduate Research Assistant. In this role, I was able to create a Machine Learning application related to 3D Chemistry atom calculator to find the potential energy surfaces in molecular system of atoms. I worked on the project using Python and its API such as Scikit-Learn, Scipy, Numpy, Matplotlib, Neural Network, and its Chemical simulation software in the Linux cluster server of research. After extensive research, I was able to conclude that the machine learning atom calculator could predict potential energy surfaces more efficiently and accurately.

In the Mathematics Department, I was able to participate in the Directed Reading for a year. In the program, I learned theoretical machine learning concepts with respect to statistics and practiced programming for R to make an advanced. Every week, I would meet with my mentor, who is an expert and PhD student in the field, and asked questions to understand and study the subject more deeply. In addition, I have worked on an individual project for autonomous vehicle and computer vision since Spring 2021. I made basic Kalman filters, traffic light detection, route planner with A* algorithm, and finding car lanes uploaded in Github.

I have attached my resume which includes more information on the variety of experiences I have gained so far. I sincerely appreciate your time in reading my resume and cover letter. Please feel free to reach out to me by phone or email to schedule a time to talk. I am looking forward to hearing from you and your team.

Sincerely,

Andrew (Seongbae) Kim