

I am writing to apply for the position Computational Scientist I of Broad Institute. Before studying computer science, I got my PhD in physics with solid background in math and modeling. I have experience in both machine learning and software development.

In my position as Full Stack Developer Intern with American Family Insurance, I was involved with project research, planning, design and testing within the Software Engineering team. In particular, I am working on collecting valuable data from intern, and integrating machine learning code and wrapping up into RESTfull APIs. In the project, I wrote the unit test code for the test driven development purpose, and then based on the test code I designed and implemented python web crawler module for collecting housing data and saving the data to DynamoDB on AWS. During the design stage I communicate with our data scientists to better understand their need for data attributes and perspectives. I also get a chance to study AWS cloud technology in more detail.

During my study as a master graduate student in computer science, I have taken four courses in data mining and have studied several important machine algorithms, such as SVM, Neural Network, Random Forest, PCA and so on. I was involved in a project investigates human postures recognition using smartphone data. During the project, I have designed algorithm and built a classifier to classify human postures. With my algorithm design, the error rate was successfully dropped down to less than 10%.

With my education and academic background and work experience, I do believe that I am a good fit for your team and able to contribute immediately after joining it. I look forward to meeting with you to further discuss my suitability for this position. I can be contacted at (646) 678-8444 and dejunqi2008@gmail.com

Sincerely

