**Amin Shirazi**[ashirazi@iastate.edu](mailto:ashirazi@iastate.edum)

**January 28, 2019**

Jefferson Biostatistics Summer Internship

RE: Internship 2020 Program

To whom it may concern:

I am a third year PhD student in statistics with master and bachelor background in statistics. I successfully passed PhD preliminary exam last summer and I am currently working on statistical data analysis of big data and specifically applying integrated data analysis on -Omics data including microbiome, genomics, RNA sequencing and gene expressed data using network and Bayesian based methods. I like to work on big data sets and apply statistical data analytics techniques to reduce the dimension of the data as well as managing them utilizing SQL and R, and that is why I am currently learning SQL and Spark.

Throughout my education, I have contributed to various research data analysis using my broad knowledge of statistics. My strengths and qualifications are close to requirements of The Jefferson research program as I have both academic and industry experience to apply scientific techniques to data analytics projects.

I have gained a lot taking graduate level courses like advanced linear models, design of experiments, reliability, data technology and visualization in R, applied modern multivariate learning, and machine learning, which have helped me have a deeper understanding of data analytics and statistical modeling.

In my 4+ years industry experience as a data analyst in R&D departments of different companies, I cooperated with various sectors and made positive statistical results through effective organization, prioritization, and follow through of the key organizational projects. I have been able to utilize statistical and analytic methods in modeling, diagnosing and interpreting heterogeneous data sets.

About my social activities, I am an executive member of [STATCOM](https://www.stuorg.iastate.edu/site/1231/officers) at Iowa State, and currently helping Ames Public Library with a big survey project. I am also a social committee member of STATers (statistical student association) at Iowa State and communicate with many under/graduate students daily, and the former treasurer of [ISSA](https://www.stuorg.iastate.edu/site/issa) with great experience of working in teams and organizing big events.

This opportunity is especially exciting as biostatistics is my favorite research area. Further, my communication, interpersonal, and leadership abilities will serve to support your continued research efforts.

Thanks for your time and consideration, and I am looking forward to hearing from you.

Sincerely,

Amin Shirazi personalization algorithms, content valuation, streaming video optimization, and research in support of product innovation  machine learning leadership, data management, communication, programming, R, SQL, curiosity, courage with smart risks, innovation, science, rigor, and high impact