



Job Title: Data Scientist

Reports to: CEO

IQuity, Inc. is a data science company using genomic and proprietary healthcare datasets to detect and monitor chronic disease. At IQuity, we developed game-changing blood tests using RNA data (genomic) to accurately identify autoimmune disease earlier than current, conventional testing methodologies. The application of data science and machine learning is the core of our business and drives our technological development.

IQuity offers three blood tests to help providers diagnose multiple sclerosis, IBS/IBD-Crohn's and ulcerative colitis, and fibromyalgia with greater than 90 percent accuracy. Disease activity and monitoring tests are currently in development and planned for release later in 2018. The analytics platform focused on population-level analytics for the prediction, detection, and monitoring of chronic disease will be made available later in 2018.

Position Description:

At IQuity we are seeking a creative, highly motivated **Data Scientist** to join a team of immunologists and computational biologists exploring gene expression patterns in autoimmune disease. Primary human blood samples will be studied in the laboratory leveraging sequencing and quantitative real-time PCR platforms to generate data. This data science position will work closely with members of research and development staff and will draw on cutting edge techniques in computer science and artificial intelligence.

Specific Responsibilities:

- Independently create and formulate mathematical models using advanced analytical methods in predictive mathematical modeling.
- Development, research, and exploration in the areas of statistics, machine learning, and experimental design including the evaluation of new analytical methodologies, approaches and solutions.
- Design, develop, and implement mathematical models in relevant computer programming language and environment.
- Verify, validate, and test models for accuracy and relevance in providing clinical information to healthcare providers; reformulate models as needed to meet changing business requirements.
- Design and deploy data science and technology based algorithmic solutions to address business needs for IQuity.
- Communicate findings to R&D team and leadership to ensure successful implementation of projects into IQuity processes.
- Cooperatively work with team members at IQuity.

Required Skills and Experience:

- Display a passion for solving analytical problems involving biological data through predictive modeling.
- A Bachelor's degree in Computer Science, Math, Statistics, Economics, Astrophysics or other quantitative field; a Masters or PhD is desirable but not required depending upon previous work history.
- > 2 years' experience in applied machine learning (Deep Learning, Ensembles, SVM, etc) and programming in R, MATLAB or Python
- Commitment to understand and obtain operational familiarity with basic molecular biology principles in the 'wet lab' including nucleic acid isolation, principles of RNA/DNA sequencing, and PCR.
- Experience in method development and the ability to define and implement technical strategies.
- Ability to work in a matrix environment, leading & influencing people at varying levels of responsibility
- Proven ability to communicate complex quantitative analysis in clear, precise and actionable manner
- Exceptional leadership, verbal and written communication, interpersonal skills and problem solving skills will be required to synchronize activities with company goals.
- Applicant must have a strong grasp of the English language in spoken and written form.

Desired Experience and Skills:

- Experience with R Shiny UI development
- Understanding of big data ecosystems including: Hbase, MongoDB, MapReduce, graph databases , Spark and virtual infrastructures such as AWS, Microsoft and Google cloud are highly desirable
- Contribution to at least one open source project, such as an R package (on CRAN, Bioconductor, or Github) or Python library
- Publication in peer-reviewed journals

Work Environment:

IQuity offers a unique and dynamic work environment that is fast-paced yet affords significant flexibility. For that reason, employees at IQuity need to be highly self-motivated and proactive at identifying and taking responsibility for tasks. Extension of a job offer implicitly implies that we consider an individual to be capable of thriving in such a versatile and unique work environment.