Ryan Harrison | Resume

Data Scientist

Status: Senior Principal Data Scientist

Field: Data Science, Statistics

Skills: R, Python, SQL, Bash, Git, AWS, Databricks

Beverly, Massachusetts

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Summary

Data scientist and biostatistician with 13 years of experience motivated to advance healthcare and clinical science with statistical modeling and machine learning/AI.

Experience

Senior Principal Data Scientist - Biogen   Dec. 2022 - Present

* Developed, deployed and maintained Shiny applications to support neurology portfolio

* Developed Alzheimer's Disease simulations using non-homogenous Markov Chain models

* Developed internal R packages for Biostatistics teams

* Analyzed proteomic, genomic, and biomarker data using statistical (differential expression analysis) and machine learning methodologies (penalized, regression, random forests, boosted trees)

* Collaborated with cross-functional teams of biostatisticians, data scientists, and clinicians

* Extensively used R, Python, SQL, Posit Enterprise, Databricks, AWS, HPC clusters

* Produced analysis datasets, tables, listings, figures, simulations, statistical modeling

* Contributed to abstracts and papers

Lead Biostatistician - CorEvitas, LLC   Jan. 2020 - Nov. 2022

* Consulted with clients to develop their queries into research projects

* Designed and managed analysis of registry data for client initiated research projects

* Responsible for writing SAPs, providing feasibility counts and power and sample size calculations, estimating timelines and hours of effort, conducting analyses, and overseeing analysts

* Authored statistical analysis reports, manuscripts, and conference abstracts and posters

* Supported data management and maintenance of IBD registry: including data cleaning, validation, documentation and preparation.

* Automated recurring reports and data transfers

* Converted legacy statistical analysis code from STATA to R language

* Oversaw transfer of Biostatistics team's code repositories to GitHub

* Developed internal R packages to generate tables and reports using custom themes and templates

* Supervised and mentored Biostatisticians

* Trained new employees on GitHub, R language, and registry data

* Interviewed job candidates

* Participated in management meetings and provided input on allocation of staff resources, contingency planning, long term goals, and other logistics.

Senior Biostatistician - CorEvitas, LLC   Mar. 2016 - Dec. 2022

* Provided oversight and consultation to IT support for the mapping and loading of RA Japan and IBD Registry data from MERGE EDC into Corrona database.

* Provide guidance and oversight to IT and data management teams on the development of comprehensive quality and integrity procedures for accurate data extracts for analysis and reporting for internal and external clients.

* Provide consult and advice to Quality and Regulatory Compliance, Data Management and Project Management on topics including EDC practices and development, subject recall for proper data collection, ID validation and verification, quality improvement tactics, and logic processes for identifying data anomalies.

* Generate and deliver reports to clients.

* Design SAPs and conduct statistical analyses for industry clients.

Associate Research Scientist/ Biostatistician - New England Research Institutes, Inc   Nov. 2010 - Mar. 2016

* Provide statistical support for the Transfusion Medicine/ Hemostasis Clinical Trials Network (TMH), DAIDS Virology Quality Assurance Program (VQA), Sickle Cell Disease Clinical Trials Network (SCDCRN), and various other

clinical trials and survey studies.

* Perform statistical analyses, such as linear and logistic regression, mixed effects models, longitudinal data analysis, survival analysis, and categorical data analysis in SAS, R, and SUDAAN.

* Prepare and present results to clients via memos, conference calls, and face-to-face meetings.

* Prepare and present abstracts for poster presentations and lectures at various conferences.

* Collaborate with investigators on manuscripts, writing statistical methods sections and providing tables and graphics.

* Serve as member of education and program planning committee.

Education

M.S. Statistics - Amherst, MA   Sep. 2008 - May 2010

* University of Massachusetts

B.A. Mathematics - Boston, Massachusetts   Sep. 2003 - May 2007

* Boston University