Jack Sleight

Summary

I am an R developer and data scientist with over 6 years of experience. My current role as R/R Shiny developer at Audit Scotland involves acting as a lead developer for the design and maintenance of web-based data applications. These are used by a team of auditors for the analysis of financial and performance audit data generated by public sector organisations in Scotland. In my previous role at Fios Genomics I acted as a lead bioinformatic data scientist providing statistical analyses for a range of clients in the pharmaceutical and academic sectors. From my experiences in both the private life science and public audit sectors, I have acquired an array of transferable skills in analysing complex data sets and developing data-centred products.

Skills

Programming

- R
- Python
- SQL
- JavaScript
- Bash

Bioinformatics

- DNA/RNA sequencing
- ASO design
- Proteomics
- High-throughput screening development

Data science

- Tidyverse/Tidymodels
- Quarto/RMarkdown
- Shiny/Plotly
- Numpy/Pandas/Matplotlib/Seaborn

Engineering

- Git
- Docker
- CI/CD
- NextFlow
- Linux
- Azure
- Relational database design

Experience

Audit Scotland, Glasgow

R/R Shiny Developer **2025-Present**

- I design and maintain web-based data applications using R, SQL and Python that are used by teams of financial and performance auditors to perform a range of analyses. Typical analyses include but are not limited to:
  - Analysis of general ledger and financial statement data.
  - Collation of Audit Scotland parliamentary interaction data.
- I design and maintain data pipelines for extracting, transforming and loading public sector data into structured and semi-structured data sets such as relational databases or JSON file stores, respectively.
- I use Git for version control and develop GitHub pipelines for maintaining code and adhering to continuous integration (CI) and continuous development (CD) practices.
- I am involved in the maintenance of Microsoft Azure services for hosting web-based applications. I lead the development of best practice guidance documentation for R programming at Audit Scotland.

Fios Genomics, Edinburgh

Senior Bioinformatics Developer 2023-2025

- I contributed to an internal codebase using R, SQL, Python and JavaScript that was used by a team of bioinformaticians. Typical analyses included but were not limited to:
  - Critical and confounding factors analysis biological experimental study designs.
  - Analysis of high dimenstional data such as gene expression, proteomic or custom array data sets.
  - Hypergeometric and gene-set enrichment testing of biological pathways.
  - Designing personalised allele-specific anti-sense oligonucleotide (ASO).
  - Data mining of public bioinformatic databases.
  - Development of machine learning models for predicting patient drug response using omics data.
- I was involved in the communication of code updates and new features via blog posts and presentations.
- I was responsible for ensuring reproducibility of statistical analyses using tools such as Docker and GitLab CI pipelines.

Senior Bioinformatician 2021-2023

- I acted as a lead bioinformatic data scientist for a range of different statistical analysis projects.
- I provided scientific and technical guidance to junior bioinformaticians.
- I was regularly involved in scoping statistical analysis plans for new and existing clients.

Bioinformatician 2019-2021

- I acted as a junior bioinformatic data scientist, performing statistical analyses for clients in the pharmaceutical and academic sectors.

Cancer Research UK Scotland Institute, Glasgow

Laboratory Aide 2015-2016

- I was part of a large team responsbile for preparation of tissue culture solutions and autoclaving of laboratory waste.

Education

University of Glasgow

Master of Science - Bioinformatics with Distinction with Distinction 2018-2019

- I was awarded a Scottish Funding Council scholarship based on undergraduate academic performance.

University of Strathclyde

Bachelor of Science - Pharmacology and Biochemistry with First Class Honours 2016-2018

- I was awarded the Biochemical Society prize for academic achievement.

University of Glasgow

Diploma of Higher Education - Medical Science 2013-2015

Training and teaching

- 2025 – I attended the Shiny in Production conference run by Jumping Rivers Ltd.
- 2022 – I completed the Exploring Genetic Variation EMBI-EBL virtual course.
- 2021 – I presented a COVID-19 R Shiny application at the Edinburgh Data Visualisation Meetup
- 2019 – I participated in a study group on “Introduction to Statistical Learning” by James et. al.