MATTHEW G. JOHNSTON

London | 1 month's notice | https://matthew-johnston.com/ | hello@matthew-johnston.com

COMPETENCIES

Coding (R, React, NodeJS, Python, Github)

- full-stack developer for British Biology Olympiad written in React, NodeJS and Postgres. Built a bespoke exam application for 30,000 students, with in depth reporting on exam results
- webmaster for British Physics Olympiad written in Python, utilising Postgres
- analysis of next-generation sequencing data, requiring the use of a high-performance computing cluster in BASH and downstream analysis in Perl and R
- statistical expert in R leading to several collaborative <u>publications</u>
- data analysis and processing in Tidyverse in R and Pandas in Python

Analytical and Problem Solving

- 4-year PhD programme and 3 fully-funded eight-week undergraduate internships, including international experience at the Université de Lausanne, Switzerland
- designed and performed my own experiments
- critically assessed colleagues' work in lab meetings and journal clubs

Self-starter

- BioTech YES Finalist: winning the Plant & Microbe round of the YES competition, 2017
- head author on a paper for the proper statistical treatment of cell-movement data after spotting a common misconception in the literature (<u>preprint</u>, under review)

Team player

- teaching colleagues to write scripts for statistical and image analysis (ImageJ, R)
- collaborative experimental work, leading to joint first authorship on a PNAS paper
- · on the organising committee for a regional conference (NoCaSS 2020)

Leader

- Chair of UK Biology Competitions: a group of volunteers who write biology exams for school students. Co-wrote the theory papers for the 2017 international competition
- Duke of Edinburgh Gold Expedition Leader
- co-President of SciSoc (Cambridge's largest scientific society)
- CCF RAF Sergeant: coaching and training cadets and taking orders from higher ranks

Communication (Oral and Written)

- selected for multiple international presentations, chosen by line-manager to present in Germany
- lay presentation to A-level students and taught primary children biology for a charity
- published technical and lay articles (https://matthew-johnston.com/publications/)

EXPERIENCE

Mar 2021 - Jul 2021

Associate Data Consultant, Capco

I received a two-week intensive consultant-focussed financial services training. This included project management (agile and waterfall work methodologies), as well as client management and business analysis.

In addition, I sat a four-week data training, focussed on data cleaning, analysis (Python, PySpark), visualisation (PowerBI) and profiling (Celonis). I worked on projects using Python and React at a Tier 1 global bank.

Oct 2016 – Jan 2021

Rotation PhD, Composition of and interactions at plasmodesmata, Faulkner Group, Crop Genetics, John Innes Centre

One of five PhD students on the flagship PhD programme designing my own split PhD, including experimental benchwork combined with a large proportion of bioinformatics and statistics.

Oct 2013 - Jul 2016

Class I, Natural Sciences, BA, Christ's College, University of Cambridge

Rosabel Spencer-Thomas Prize in Natural Sciences (2016)

Christ's College Sporting Award (2016)

Exhibition Prize (2014)

2015/16 – Plant Sciences: including a 2-term research project (77%)

2014/15 – Biochemistry, Chemistry B, Plant and Microbial Sciences (Rank 3/66) 2013/14 – Biology of Cells, Chemistry, Mathematics (80%), Physiology of Organisms

Sept 2011 - Jul 2013

A* in A2 Biology, Chemistry, Further Mathematics, Mathematics, Physics, The Judd School, Kent