Professional Profile & Pursuit

I am a highly reliable, project focused bioinformatics & data scientist.

With over 6 years of experience accrued, I am self-driven, and I enjoy developing pipelines and drawing out analytical insights that are scientifically impactful.

I am especially looking for a position as a bioinformatics or data scientist to continue to discover, learn and build.

Career Experience

The Royal Marsden Hospital, London

Sept 2022 - Present as Trainee Clinical Bioinformatics Scientist

- In addition to the duties mentioned in my previous RMH role, I have developed and continue to develop new
 Command Line Interface Tools for various bioinformatics tasks e.g. uploading and retrieving data and
 detecting sample contamination.
- I am currently conducting research on the detection of Homologous Recombination Deficiency, and I have developed a pipeline for this purpose.
- As part of data analysis in my research and clinical work I measure performance metrics and apply **Statistical Tests** to assess the significance of differences and relationships in clinical data.
- My coursework provided opportunity to once again engage in explorative data analysis, this time on single cell RNAseq data using data science packages from Python.
- In my investigative work, I've used non-classical statistical methods like **Machine Learning** to predict classified data. I've also used **Bayesian Analysis**.
- I use Git, GitHub, Agile and CI/CD methodology in the development of all software I work on.
- I contribute to and conduct validations, verifications, audits, risk assessments, SOP writing & their maintenance. I also raise non-compliances, apply root cause analysis, assess clinical impact, suggest remedial and corrective action when errors with clinical impact arise.

The Royal Marsden Hospital, London

Jan 2022 - August 2022 as Bioinformatician

- I managed and ran the clinical bioinformatics pipeline on the High-Performance Computing (HPC) Cluster for the analysis of various NGS data, including tumour & germline Gene Panels, WGS, WES, RNAseq and ctDNA data.
- I quickly developed a thorough understanding of the Clinical pipeline and service more broadly, enabling me to **troubleshoot analysis issues** raised by clinical and research scientist colleagues to ensure smooth running of both the diagnostic service and translational research.
- I curated data stored within the **SQL database**, pulling, adding and modifying data stored.

DOLAPO AJAYI

- My main project here was to investigate the methylome landscape of Undifferentiated Sarcoma using Reduced Representation Bisulphite Sequencing (RRBS) Illumina Infinium Methylation Array data (27K/450K/850K).
- I developed NGS pipelines for processing RRBS and Infinium Methylation Array data.
- I investigated the epigenetic data using various data science and statistical methods contributing to publication: https://doi.org/10.1038/s41586-022-04738-6.
- I worked as bioinformatics support to lab group colleagues, inter-group collaboration within the institute and with external researchers.
- I regularly **presented research findings and papers** to weekly lab group and journal clubs.

Animal and Plant Health Agency, Addlestone

February 2018 - March 2019 as Bioinformatician

- Here I developed and maintained an NGS pipeline for salmonella serovar identification and surveillance in the UK.
- It was here that I translated a pipeline written in Bash into Python and in doing so I learnt to code using Python.
- I learnt and carried out **phylogenetic analysis** of bacteria samples, including for publication: https://doi.org/10.1016/j.vetmic.2018.11.003.
- I wrote Standard Operating Procedures for quality control, NGS pipeline usage, Virtual Machine usage etc.

St George's Healthcare NHS Trust, London

September 2013 - February 2018 as Biomedical support worker

- I was regularly rostered on **tissue embedding** orientating the tissue correctly in preparation for microtomy.
- I did microtomy using a microtome to cut thin sections onto slides for staining.
- I also did tissue staining for microscopic diagnosis and prognosis e.g. immunofluorescence.
- I wrote up and maintained Standard Operating Procedures.

Education

MSc Clinical Science - Genomic Sciences (Clinical Bioinformatics Genomics)

University of Manchester, Expected completion in September 2025

MSc Bioinformatics with Systems Biology

Birkbeck College, 2017

BSc Biomedical Science (Hons)

London Metropolitan University, 2013

Skills

Bioinformatics and Data Science Blog: https://dolapoa.github.io

IT Skills: Strong proficiency in MS Office, System Administration of Linux Operating Systems. Strong proficiency in Command Line Interface, HPC & VM usage. Experienced in version control with Git and GitHub: https://github.com/DolapoA, and the iterative development cycle – including Agile plus CI/CD.

Coding/Scripting Languages: Bash, Python, R, HTML, CSS, MySQL

Languages: English native, beginner Spanish.

DOLAPO AJAYI

Achievements, Certifications & Licenses

Award:

APHA Award for Best Lab Group, Salmonella Testing Team, 2018

Certifications:

- Good Clinical Practice (GCP) Refresher Certificate
- Essentials of Digital Clinical Safety (DCS)

Interests

I'm an avid reader and I enjoy calisthenics, cycling, football, tennis and weightlifting.

DOLAPO AJAYI