

Professional Profile

I am pursuing work as a cloud engineering with a view to become a solutions architect. I have acquired and developed strong technical and communication skills as a bioinformatician and a trainee clinical scientist. I have extensive experience of working with Linux, Bash programming, HPCs, virtual machines, containerisation with Docker and Singularity, Git version control and code reviewing. My track record of completed projects demonstrates my competence - such as the successful development of a whole genome sequencing pipeline to analyse Salmonella genomes for UK surveillance of notifiable Salmonella strains.

I have a solid understanding of cloud computing having obtained several AWS badges in Cloud technology and completed much of AWS' education content, like AWS Simulearn, working on several hands-on projects provision cloud infrastructure with Infrastructure as Code. My enthusiasm for this field is so great that I make time to learn about cloud technology despite having a dissertation and coursework to complete for my MSc. I am currently preparing to obtain the AWS Solutions architect associate certification, and I am looking for graduate to mid-level roles in cloud engineering and cloud security.

Education

MSc Clinical Science - Genomic Sciences (Clinical Bioinformatics Genomics)

**University of Manchester, Expected completion in
September 2025**

Key modules: Software engineering (**Merit**), Applied Statistics, Data Science & Quality (**Distinction**), and Service Development & Delivery (Project Management)

MSc Bioinformatics with Systems Biology (Merit)

Birkbeck College, 2017

Key Modules: Biocomputing, Database Management.

BSc Biomedical Science (Hons)

London Metropolitan University, 2013

Certifications

AWS Educate Introduction to Cloud 101 Badge

AWS Educate, March 2025

Understanding Cloud Computing in general, AWS in particular, AWS Core services: S3, EC2, VPC, RDS, IAM, Lambda and CloudWatch

AWS Educate Introduction to Generative AI Badge

AWS Educate, 2025

Understanding: Foundation Models, Amazon Bedrock, Q Developer, SageMaker JumpStart, AWS Inferentia and Trainium

AWS Educate Getting Started with Networking Badge

AWS Educate, 2025

Understanding: OSI – 7 layers, VPCs, the allocation of IP addresses by CIDR blocks, AWS Direct Connect, AWS Private Link, AWS Transit Gateway, Firewalls & Security Groups and more

AWS Solutions Architect Associate Certification (preparing)

AWS, 2025

Essentials of Digital Clinical Safety (DCS)

NHS Digital, 2024

Awareness and understanding of: regulations for the acquiring, storing, usage and protection of sensitive and confidential patient data.

Core Skills

- **IT Skills:** Very good with Linux Operating Systems. Strong proficiency on the Command Line Interface. Very good with Bash, High Performance Compute Clusters & Virtual Machine usage, Containerisation (Docker and Singularity). Experienced in version control with Git, GitHub: <https://github.com/DolapoA>. I have also worked with REST API and the Agile and iterative development cycle. I understand CI/CD. I'm good with MS and Libre Office.
- **Coding/Scripting Languages:** Bash (miscellaneous CLI commands like AWK, Grep, Sed etc), Python, R, HCL Terraform, HTML, CSS, MySQL
- **Style of Work:** Plan → Work → Reflect. Each day of mine is planned with tasks which I then proceed to complete. Planning is a matter of setting out tasks to complete and prioritising the order in which they are completed. Unfinished tasks are carried over to the next day or to the next meeting with the team or to whom I report to. I have found that it's important to reflect and keep in mind the overall aim of project by remembering how my work integrates with my colleague's work. I take the agile iterative approach to the development of scripts and software.
- **Method of Troubleshooting:** With a first principles approach to cloud and software engineering and a simple emphasis of carefully reading errors, over the course of my career, I have developed the mindset required to work independently. First resolving errors to my satisfaction and if necessary, verifying with other staff.
- **Communication:** I report updates on my projects to my line manager at agreed levels of frequency. Identifying key stakeholders is one of the first things I do when taking on a new project. I do this to ensure that everyone that my project may affect is sufficiently informed and involved to make the project a success. I look for opportunities to present work or something relevant to the team's work because preparing for presentations in scientific settings focuses the mind as I also prepare for what could be asked of the topic.

Career Experience

The Royal Marsden Hospital, London

Sept 2022 – Present as Trainee Clinical Bioinformatics Scientist

- I am leading on the development of a Clinical [Homologous Recombination](#) Deficiency (HRD) test for patients with High Grade Ovarian Cancer. This project involves a literature review, designing and developing a bioinformatics pipeline, assessment of performance metrics and exploratory analysis of results. I work with stakeholders to ensure that the project is meeting expectations and is on schedule.
- I have successfully developed CLI tools for the secure and efficient upload of patient data to external companies for analysis. To do this I worked with key stakeholders, namely Clinical Scientists, Research Scientists, Lab Scientists and my Line manager.

- I have successfully developed and delivered training in the use of Git, [GitHub](#) for version control for all script and software development in the bioinformatics team. I was also responsible for the change in policy to this new way of working.
- I have conducted or contributed to several validations, verifications, audits, risk assessments and writing of SOPs. I have raised non-compliances, applied root cause analysis, assessed clinical impact, suggested remedial and corrective action when errors with clinical impact have arisen.

The Royal Marsden Hospital, London

Jan 2022 – August 2022 as Bioinformatician

- Working with Rocky Linux and Mac OS, I managed and ran the **clinical bioinformatics pipeline** on the **High-Performance Computing (HPC)** Cluster for the analysis of various NGS data.
- I managed and curated data stored within the SQL database, pulling, adding and modifying data stored.

UCL Cancer Institute, London

March 2019 –December 2021 as Bioinformatician

- Working with Linux Centos 7, my main project here was to investigate the methylome landscape of Undifferentiated Sarcoma using various data types including Reduced Representation Bisulphite Sequencing (RRBS) Illumina Infinium Methylation Array data (27K/450K/850K). My work for this project is published in [Nature](#) journal.

Animal and Plant Health Agency, Addlestone

February 2018 – March 2019 as Bioinformatician

- At the APHA I **successfully developed and maintained an NGS pipeline** for salmonella serovar identification and surveillance in the UK.
- It was at the APHA that, I mainly worked with Virtual Machines, using Linux Ubuntu and I translated a software written in Bash into Python and in doing so I learnt to code using Python.
- I carried out phylogenetic analysis of bacteria samples, including for [publication](#).
- I took charge of writing Standard Operating Procedures for quality control, NGS pipeline usage, Virtual Machine usage and more.

St George's Healthcare NHS Trust, London

September 2013 – February 2018 as Biomedical support worker

- I organised regular Continuous Professional Development talk events by liaising with Surgeons, Clinicians and Biomedical scientists.

Publications & Achievements

- **Professional Blog:** <https://dolapoa.github.io>
- **Cloud Projects:** Designing and provisioning various AWS cloud infrastructure with Terraform IaC for different use cases: https://github.com/DolapoA/cloud_projects
- **Nature** – “Signatures of copy number alterations in human cancer” - <https://doi.org/10.1038/s41586-022-04738-6>
- **Veterinary Microbiology** – “Role of wild birds and environmental contamination in the epidemiology of Salmonella infection in an outdoor pig farm” - <https://doi.org/10.1016/j.vetmic.2018.11.003>
- **APHA Team Award 2019** – Winning team for Salmonella Surveillance

Hobbies & Interests

I'm an avid reader of history, philosophy, science, theology and more. I enjoy doing calisthenics, cycling, football, tennis and weightlifting.