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📍 Bristol, UK



APPLICABLE SKILLS

• Data Curation

Detail-oriented ETL data curation has been vital to every step of my multi-omic bioinformatics research. Only through data-driven decision making can my clients foster innovation to maintain a competitive edge. Computer proficient across GUI/CLI based operating systems (Windows/*nix). Able to build high performance Linux compute servers, and current system administrator for several CLI based supercomputers; all of which are configured to process terabytes of data daily.

• Project Management

Consultancy and data processing with international collaborators requires diligent record keeping of pipelines implemented, including all parameters used as well as version control. Experience with contracts operating within the Agile/Scrum framework. This approach shifts the focus to iteratively delivering solutions of the highest value for product owners.

• Independent Development

Self-guided learning has been the backbone of my research and professional career. With little specialised mentorship, all learning and development had to be self-directed and managed.

• Communication

Excellent communication skills; both written and verbal, as demonstrated by invited speaker roles, a lecturing position, and extensive publications in multiple high-impact research journals.

• Bioinformatic Pipeline Development

RNAseq/Microarray Pipeline development, including meticulous quality control. All of which were set in place using FAIR data principals and fully automated for speed of use. Current projects involve maintaining software installation pipelines, making use of the Azure DevOps platform.

CAREER

• Consultant Bioinformatician

📍 InSilico Consulting, UK

📅 2021 -

Director of bespoke consultancy company for both academic and commercial research groups.

• Research Associate Bioinformatician

📍 University of Bristol, UK

📅 2019 - 2021

Bespoke consultancy on a range of novel bioinformatic experiments for academic research groups.

EDUCATION

• Ph.D. Diagnostic Medicine

📍 University of Bristol, UK

📅 2015 - 2020

Identifying novel prognostic biomarkers of neurogenic hypertension

• M.Sc. Molecular Neuroscience - 74%

📍 University of Bristol, UK

📅 2014 - 2015

• B.Sc. (Hons) Biochemistry - 69%

📍 University of Surrey, UK/Universidad Pompeu Fabra, ES

📅 2010 - 2014

Professional secondment year researching the effects of Δ^9 -THC on memory deficits at world leading neuropharmacology department in Barcelona

SOFTWARE PROFICIENCIES

Languages/Packages

R Bash Python LaTeX Git SQL JavaScript Cypress
Docker Perl

Visualisation & Graphical

BLAST Graphpad Prism Ingenuity Pathway Analysis (IPA)
Partek FlowJo TOAD Integrative Genome Viewer (IGV)
SQL Developer Adobe Creative Cloud

Productivity & other

Microsoft Office Reference Managers Azure DevOps

APPLICABLE PROJECTS

Software Development

Developed proprietary in-house drug discovery pipeline as Head of Data Science for a pharmaceutical company. This curated publicly available and in-house *in-vivo* data to produce drug target predictions to accurately predict commercially viable targets to take forward. This was re-worked into an online accessible GUI to allow for wet-lab scientists to run through the pipeline *ad-libitum*.

Data Visualisation

Onboarded onto several mature projects that sat on swaths of invaluable yet inaccessible data. Using my experience in command-line tools I produced a set of clear graphics that could demonstrate the importance of their data. This was crucial in enabling these companies to succeed in their grant proposals and investor awards.

Database Governance

Extensive experience in building databases from the ground up, most recently a FHIR HL7 compliant referral system for an NHS Blood and Transplant software tender. Built using Oracle Apex on top of an Oracle SQL database, the requested solution allows for a scalable and secure platform for clinicians to manage their upcoming referrals.

PROFESSIONAL DEVELOPMENT & AWARDS

2021 —	Founded InSilico Consulting Limited, for bespoke bioinformatics solutions
2020 —	Co-director MSc Bioinformatics and Entrepreneurship
2017	Supervised successful MSc Project Identifying novel prognostic biomarkers of hypertension
2017	International Union of Physiological Scientists (IUPS) <i>Rio de Janeiro, Brazil</i> Hypertension; the Genome Environment interface - Oral presentation
2017	World Congress on Neurohypophyseal Hormones (WCNH) <i>Mangaratiba, Brazil</i> Effects of ageing on biosynthetic processes in the rat hypothalamic osmoregulatory neuroendocrine system - Poster presentation
2016	Nominated for Post-Graduate Excellence in Teaching award
2016 —	Developed and delivered original lecture materials for MSc Molecular Neuroscience Introduction to Bioinformatics
2016 —	Developed and delivered practical materials for MSc Molecular Neuroscience Introduction to Genetic Cloning
2016	Home office Animal handling license
2014	Eli-Lilly Award Awarded for the highest neuroscience grade in cohort

HOBBIES & INTERESTS



Surfing



Drone
Piloting



Photography



3D Printing

PUBLICATIONS & REFERENCES

Publications and references available on request