

DATA SCIENCE · RESEARCH

Computational researcher transitioning from academia to the data science industry.

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github.com/MarkTranHS in linkedin.com/in/marktranhs

marktranhs.github.io

SKILLS

Programming Languages Python (matplotlib, numpy, pandas, seaborn, scikit-learn), R (dplyr, qqplot2, readr, tidyr, tibble), SQL, Git.

English, Polish, Vietnamese.

EXPERIENCE

12/2023 - Present **Research Consultant**

Outsmart Insight

Freelance. Remote

Top 1% consultant among over 5000 researchers from world-leading universities.

- Identified, shortlisted and interviewed technical experts in R&D for assessment of research proposals, facilitating deployment of innovative scientific solutions to commercial viability.
- Evaluated deployment strategies of emerging technologies for research institutions and multinational companies, including BAE Systems and Sellafield.

09/2018 - 05/2024 **Doctoral Researcher**

University College London

London, UK

- Developed and published a computational tool facilitating the integration of multi-omics data to infer cancer evolutionary histories.
- Produced five simulated cancer datasets with noise simulations for optimisation and benchmarking.
- Optimised the methodology's algorithm, resulting in a performance increase of up to 60%.
- Reduced code complexity, increasing the tool's efficiency by over 1000%, and lowering runtimes from days to hours.
- Assessed the tool on large-scale cancer datasets, identifying novel evolutionary processes for improved patient diagnostics.
- Delivered presentations and engaged in poster competitions at multiple UK and international conferences.

08/2017 - 09/2017 **Student Ambassador**

Lancaster University

Lancaster, UK

Mediated communication with university staff, leading to admission of over 50 prospective students.

07/2016 - 08/2016 Research Assistant

Lancaster University

Lancaster, UK

Refined the diagnosis of Ebola viruses by 40% through optimisation of a Western Blotting protocol.

EDUCATION

Doctor of Philosophy (PhD)

09/2018 - 05/2024

University College London

London, UK

Doctor of Philosophy in Bioinformatics

Master of Research (MRes)

09/2017 - 11/2018

University College London

London, UK

Master of Research in Biosciences: Stem Cells and Developmental Biology.

Bachelor of Science (BSc)

10/2014 - 07/2017

Lancaster University

Lancaster, UK

Bachelor of Science (Honours) in Biomedical Science.

PROJECTS

VGSP: Video Game Success Predictor

06/2024 - 08/2024

Developed and tested classification models to identify key factors contributing to a success of a video game.

MAPSCE: MAPping SubClonal Events

Developed a computational tool for integration and mapping of subclonal events of cancer patients on tumour evolutionary trees.

Released the tool on GitHub as an R package and further translated the method to Python.