

YUSUF ABDULLE

London, England, United Kingdom

EDUCATION

University College London

MSc Clinical Neuroscience – Merit

2020 - 2021

📍 London, UK

University of Brighton

BSc (Hons) Biomedical Science – First Class Honours

2017 - 2020

📍 Brighton, UK

EXPERIENCE

Research Assistant

Sep 2023 — Current

University College London

📍 London, UK

- Applying novel Graph Machine Learning techniques to Knowledge Graphs and real-world, large-scale Electronic Health Records to enable early neurodegenerative disease diagnosis.
- Working on analysing and addressing AI-induced health disparities across racial, gender, age, and socioeconomic groups, with a focus on creating tools for quantification and mitigation.
- Providing mentorship and supervision for undergraduate students and interns, offering guidance on research projects.

Translational Data Scientist

Oct 2022 — Apr 2023

BioCorteX

📍 London, UK

- Effectively utilised agile methodology and leveraged Kanban boards in Project Management to streamline workflows and ensure timely delivery of projects.
- Helped to design a first-principle computer simulation to identify potential pitfalls in clinical trials thereby improving patient treatment response and reducing trial associated costs.
- Developed and deployed an automated benchmarking tool to production that predicted DNA sequences against known databases resulting in a change in approach for internal engines to improve prediction results.

Research Assistant

Sep 2021 — Oct 2022

University College London

📍 London, UK

- Applying novel Graph Machine Learning techniques to Knowledge Graphs and real-world, large-scale Electronic Health Records to enable early neurodegenerative disease diagnosis.
- Working on analysing and addressing AI-induced health disparities across racial, gender, age, and socioeconomic groups, with a focus on creating tools for quantification and mitigation.
- Providing mentorship and supervision for undergraduate students and interns, offering guidance on research projects.

Clinical Research Assistant

Oct 2020 — Sep 2021

Royal Free NHS Foundation Trust

📍 London, UK

- Collaborated with NHS Digital on the setup and maintenance of COVID-19 vaccine records.
- Worked in a multidisciplinary team consisting of clinical researchers, clinicians, nurses to ensure successful delivery of trial vaccines.
- Worked on the progression of vaccine trials for various COVID vaccines (Novavax, Moderna and Valneva)
- Compiled documentation necessary for clinic visits, monitoring visits, and audits and contributed to academic oncology research initiatives.

AWARDS

Santander Summer Studentship

August 2019

JOURNAL ARTICLES

- 1. Enhancing Human-Computer Interaction in Chest X-ray Analysis using Vision and Language Model with Eye Gaze Patterns**
Kim, Y., Wu, J., Abdulle, Y., Gao, Y., & Wu, H. (2024). Enhancing Human-Computer Interaction in Chest X-ray Analysis using Vision and Language Model with Eye Gaze Patterns. *arXiv preprint arXiv:2404.02370*.
- 2. Understanding neck collar preferences and user experiences in motor neuron disease: A survey-based study**
Spears, S. D., Abdulle, Y. F., Lester, T., Torii, R., Kalaskar, D. M., & Sharma, N. (2024). Understanding neck collar preferences and user experiences in motor neuron disease: A survey-based study. *Disability and Health Journal*, 101585.
- 3. Benchmarking and Analyzing In-context Learning, Fine-tuning and Supervised Learning for Biomedical Knowledge Curation: a focused study on chemical entities of biological interest**
Groves, E., Wang, M., Abdulle, Y., Kunz, H., Hoelscher-Obermaier, J., Wu, R., & Wu, H. (2023). Benchmarking and Analyzing In-context Learning, Fine-tuning and Supervised Learning for Biomedical Knowledge Curation: a focused study on chemical entities of biological interest. *arXiv preprint arXiv:2312.12989*.
- 4. Scoping review of knowledge graph applications in biomedical and healthcare sciences.**
Budhdeo, S., Zhang, J., Abdulle, Y., Agapow, P. M., McKechnie, D. G., Archer, M., ... & Sharma, N. (2023). Scoping review of knowledge graph applications in biomedical and healthcare sciences. *medRxiv*, 2023-12.
- 5. Neck Collar Assessment for People Living With Motor Neuron Disease: Are Current Outcome Measures Suitable?**
Spears, S. D., Abdulle, Y. F., Korovilas, D., Torii, R., Kalaskar, D. M., & Sharma, N. (2023). Neck collar assessment for people living with motor neuron disease: are current outcome measures Suitable?. *Interactive Journal of Medical Research*, 12(1), e43274.

Conferences

- 1. Using a PET atlas to probe neurotransmitter-disease associations in Mild Cognitive Impairment and Alzheimer's disease.**
📍 Budapest
9th EAN Congress, 1-4 July 2023.
- 2. Using a PET neurotransmitter atlas to probe associations in Alzheimer's disease and MCI.**
📍 Vancouver
2023 OHBM Annual Meeting

Skills

- **Languages:** English, Somali
- **Programming Languages:** Python, R, Bash
- **Libraries:** PyTorch, TensorFlow, Scikit-Learn, NumPy, Pandas, Matplotlib, Seaborn, PyTorch Geometric, NetworkX
- **Technologies:** Git, PostgreSQL, AWS, GCP