JUSTIN WATERFIELD, MMCi

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LinkedIn

PROFILE

Experienced data manager with a background in data science and healthcare. Trained as an electron microscopist, skilled in microscopy techniques and digital pathology. Adept at fulfilling multiple roles including data analyst, scientist, and operations manager. Demonstrated leadership as a data operations manager, safety officer, and EHR subject matter expert. A collaborative team player with exceptional communication skills, committed to continual learning and leadership development.

DATA SKILLS

Data Operations: Atlassian/Jira/Confluence, Agile + Waterfall Development, Databricks, AWS S3
Data Science: GitHub, PowerBI Tools/Tableau, AI/ML, Apache Airflow + ETL **GitHub Portfolio**
Programming: SQL, Python, Shell, R

EDUCATION

DUKE UNIVERSITY, School of Medicine, Durham, NC
Master of Management in Clinical Informatics, 2020, 3.7 GPA
Practicum: **Evaluate a Duke Health Technology Services Transition to a Revenue Generating Business Model**

WINTHROP UNIVERSITY, Rock Hill, SC
Bachelor of Science in Biology, 2009

PROFESSIONAL EXPERIENCE

healthverity, Philadelphia, PA (Remote) 2022 - 2024
Data Operations
Data Operations Support, Manager (*2022-2024*)

• Lead daily stand-up meetings and manage agile work development using Kanban methodology
• Monitor and troubleshoot over 80 data ingestion pipelines daily, resolving issues within a 24–48-hour timeframe
• Oversee the data warehouse, including hundreds of high-priority data feeds
• Create and maintain data feeds and tiles for utilization in the company's marketplace
• Manage the support team handling company-wide data-related issues, including monitoring portal requests and performing data curation for data quality review
• Develop and maintain GxP, SOP, and CAPA documentation related to Data Operations

RTI International, RTP, NC 2020 - 2022
GenOmics, Bioinformatics, and Translational Research Center Biostatistics and Epidemiology Division
Bioinformaticist, Systems Analyst 3 (*2020-2022*)

• Working group manager for the PhenX Psychosocial & Social Determinants of Health Working Group
• Project Member of the BRAIN Initiative; work with NIH, NCBI, NHGRI
• Develop and review microscopy ontologies and metadata standards
• Prepare, analyze, and visualize data across biomedical domains
• Ensure datasheet quality, development, and deployment for the PhenX Toolkit
• HL7 and healthcare/EHR data subject matter expert

DUKE UNIVERSITY HEALTH SYSTEM, Durham, NC 2009 - 2020
Molecular Pathology
Medical Laboratory Scientist, Advanced (*2009-2020*)

• Analyzed and assessed over 600 clinical patient samples annually using Surgical Pathology Electron Microscopy (SPEM) to aid pathologists in diagnosing infectious diseases
• Prepared and verified EM diagnostic virology samples, contributing to clinicians' patient diagnosis process
• Accountable for efficient supply chain management and logistical operations within the laboratory

Beaker Super User (2018-2020)
• Managed all Beaker accessioning and troubleshooting, addressing Beaker-related issues promptly to ensure smooth operations
• Engaged in EHR tasks related to patient care, resolving system challenges, and optimizing workflow efficiency
• Conducted testing in a controlled environment to prepare for upcoming production releases, ensuring seamless integration and functionality

Recruitment & Retention Committee Chair (2020)
• Led and coordinated the Recruitment & Retention Committee, setting agendas and driving initiatives to enhance employee engagement and retention
• Organized outreach efforts with local schools and organizations to foster community engagement and attract talent
• Collaborated with other work culture committee chairs and HR staff to cultivate a positive and supportive work environment for DUHS employees

ACADEMIA

Duke University, Durham, NC
Master of Management in Clinical Informatics
College of Medicine

Co-Mentor Student Practicum: Develop a model to unify the data elements in FHIR & OMOP (*2022-2022*)

• Collaborated with Dr. Ed Hammond to guide a group of graduate students in completion of their master's practicum (thesis) project:

Proposed a shared data model to unify variables and data models, aiming to streamline the costly and time-intensive process of mapping. The project focused on aligning data elements within FHIR and OMOP frameworks, necessitating modifications to both models. The objective was to produce comprehensive documentation outlining the approach to achieve this goal, enabling other stakeholders to leverage and build upon the initiative.

Data Science Teaching Assistant (*2020-2021*)

• Assisted the professor in delivering lectures, preparing course materials, and grading assignments
• Provided supplementary instruction on foundational concepts including coding fundamentals, IDE setup, and basic machine learning principles
• Facilitated student learning in areas such as data visualization, machine learning, artificial intelligence, and the data science pipeline, with a focus on applications in healthcare

PUBLICATIONS

Ha CI, Desai AK, **Waterfield J**, Kazi ZB, Austin SL, Bossen EH, Kishnani PS, Buckley AF. (2017). Outside the fiber: interstitial pathology of skeletal muscle in infantile Pompe disease. *Molecular Genetics and Metabolism, 1*(120), S60-S61. DOI: 10.1016/j.ymgme.2016.11.136

Ropelewski, A. J., Rizzo, M. A., Swedlow, J. R., Huisken, J., Osten, P., Khanjani, N., ... & Huggins, W. (2021). Essential metadata for 3D BRAIN microscopy. *arXiv preprint arXiv:2105.09158*.