

Travis P. Hesketh

Software Developer / Data Engineer



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@thesketh

Lead developer with strengths in data engineering and backend API development. Chemistry graduate, former chemistry researcher. Currently working for a consultancy in the healthcare sector. Interested in continuing to build a better world. Currently based in London (England).

Technologies

- **Languages:** Python, SQL (some Lua & TypeScript, basic Rust)
- **Frameworks:** PySpark, pandas, FastAPI, numpy, Flask, pydantic, polars, sklearn
- **Clouds:** AWS (some GCP & Azure)
- **Databases:** SQLite, DuckDB, Postgres, SQL Server, Mongo & Dynamo
- **Testing/Documentation:** pytest, unittest, behave, pdoc

Education

Chemistry (Professional Experience), *University of Strathclyde*, 2014 – 2018

Bachelor of Science, First Class Honours

Employment

Principal Consultant (Data Optimisation), *Aire Logic Ltd.*, July 2023 – Present

Lead Software Developer, *Aire Logic Ltd.*, July 2023 – Present

Senior Software Developer, *Aire Logic Ltd.*, July 2021 – July 2023

Software Developer, *Aire Logic Ltd.*, July 2020 – July 2021

Employed as backend Python engineer working as a consultant in the healthcare sector.

- Heavily involved in recruitment: interviewing and marking technical assessments
- Key technical contributor to several high-valued public sector contract bids
- As principal consultant, managed clients within the Data Optimisation space

Data Engineer (Contract), *NHS Digital (Burden Reduction)*, July 2022 – Present

Worked as senior data engineer on a project to reduce supplier workload: a team of three experienced engineers building an alpha to replace 15 legacy submission portals with a single, config-driven tool. On contract from Aire Logic.

- Worked on design and implementation of the initial tool, which combined the customer's existing tech stack (Python/Spark/SQL) with a new pydantic frontend to perform complex, highly configurable validations and provide useful feedback.

- Expanded the tool's functionality to handle datasets with arbitrarily nested structures, and together with the rest of the team implemented support for a large-scale costing dataset (the PLICS collection).

Data Engineer (Contract), NHS Digital (Vaccinations Task Force), Sept. 2021 – July 2022

Worked as a data engineer on England's vaccination data pipelines, implemented in Databricks on AWS. This team manages the flow of data from vaccination suppliers to primary care systems and central bodies. On contract from Aire Logic.

- Led technical direction for the project, working to deal with COVID legacy.
- Built more generic components to split more complex workflows into more modular, testable stages.
- Mentored junior team members, working to spread knowledge and reduce siloing.
- Strived to improve stability of the pipelines without losing velocity. Expanded testing (integration and unit) and the use of static analysis tools (mypy, pylint).

Data Engineer (Contract), NHS Digital (Open Data and Dashboards), Sept. 2020 – Sept. 2021

Worked in data reporting for COVID statistics, primarily supplying data to a series of public and private Tableau dashboards. On contract from Aire Logic.

- Supported critical national-scale dashboards used by the Department of Health and Social Care to monitor pandemic progression and prioritise resource allocation.
- Automated manual data science QA checks, saving 14 person-hours of work weekly.
- Planned, instigated, and implemented a cloud migration for key data pipelines, increasing security & observability, and decreasing cost & complexity.
- Solved blocking deployment issues (performance, caching) for the [Coronavirus in Your Area dashboard](#).

Postgraduate Researcher, University of Strathclyde, Oct. 2018 – June 2020

Conducted PhD-level academic research in computational chemistry using molecular dynamics to investigate bioinspired materials. Made extensive use of Python workflows for simulation/analysis; mentored Masters students (teaching Linux/Python); collaborated with a New York-based group.

Placement Student, Optibrium Ltd., July 2017 – July 2018

Chemistry placement whilst attending the University of Strathclyde. Worked in cheminformatics building machine learning models from bioassay and chemical property data for the pharmaceutical industry (using sklearn and Optibrium's StarDrop software).

Interests

Enjoy being around and meeting new people, keeping up to date with current events, playing guitar, and sudoku puzzles. Vinyl collector, typography fan, and indoor climber. Terrible chess player.