Oliver Burden

📍 Yorkshire, UK ✉ oliver@orburden.co.uk 🔗 linkedin.com/in/oliver-burden-b1323626

📞 07885 975231 🌐 www.orburden.co.uk

Professional Profile

Data Engineer with a data scientist's mindset — applying advanced SQL, automation, and modelling to deliver efficiency and insight in data-centric, process-driven organisations such as NHS Digital (national healthcare IT) and TSYS (global payments processing). Across my career I've focused on using data to reduce operational risk, improve decision-making, and streamline business processes. Skilled in SQL Server optimisation, Python, and BI platforms, with hands-on experience in cloud governance (Azure , Microsoft Purview) and intelligent automation.

Committed to continuous learning, with recent professional development in Microsoft Fabric, Power BI, and Databricks. My approach combines the rigour of engineering with the curiosity of data science: building systems that not only run efficiently, but also generate meaningful business value.

Key Skills & Methodologies

- **Data Engineering & Optimisation:** SQL Server (2008+), T-SQL, SSIS, ETL pipelines, query tuning
- **Automation & Programming:** Python, Terraform, PowerShell
- **Analytics & BI:** Power BI, Tableau, SSRS, SSAS, data modelling
- **Governance & Cloud:** Azure, Microsoft Purview, Databricks
- **Collaboration, Communication & Delivery:** works effectively across technical and non-technical teams; translates complex concepts into clear business insights; creates documentation that supports shared understanding
- **Problem-Solving & Adaptability**: thriving in changing environments, applying creative solutions
- **Stakeholder Trust & Engagement**: building confidence in data systems by delivering reliable outputs
- **Continuous Learning**: proactive development of new skills to stay ahead of evolving industry practice

Professional Experience

Career break and professional development| November 2024 – Present

- Built a Python proof-of-concept to surface the hidden financial cost of Microsoft Purview asset scanning, enabling clearer governance investment decisions
- Investigated generation of production-like synthetic test data from metadata to support quality assurance without risking data leakage.
- Completed targeted professional development: Microsoft Fabric, Databricks Fundamentals, Power BI.

TSYS   Production Support Analyst| March 2020 - October 2024

Focus: Support, maintenance, and automation
- Enhanced SQL Server and Tableau environments, boosting reliability and user confidence.
- Optimised execution plans and indexing, cutting runtimes and improving responsiveness.
- Automated environment monitoring with PowerShell/Python, reducing manual checks.
- Replaced fragile Tableau automation with robust Python workflows.
- Streamlined pipelines by refactoring legacy SQL/ETL processes and automating GCP uploads, handling data sources ranging from database-to-database transfers to CSV and JSON ingestion

Business Intelligence|August 2016 – March 2020

Focus: Development and data architecture
- Designed and maintained relational data models to support BI.
- Built and optimised ELT processes, reducing manual intervention.
- Migrated complex multidimensional data structures into flatter, simpler models.
- Automated Tableau reporting with TabCMD, scaling BI delivery.

NHS Digital, Database Specialist|July 2011 - August 2016

- Automated national data submissions by self-teaching Java, cutting turnaround from days to hours.
- Built on prior NHS experience by continuing to translate complex mathematical indicator specifications into SQL pipelines
- Used tSQLt unit tests to safeguard legacy SQL routines, reducing the risk of breaking critical processes and improving system reliability.
- Ensured compliance across datasets published nationally

Contracting (ASDA, NHS Digital)

ASDA, VBA Developer|March 2011 – June 2011

- Supported data acquisition process from Walmart to ASDA platforms

NHS Digital, *Information Analyst*|January 2010 – October 2010

- Streamlined the Indicator Packaging System by removing redundant code, reducing complexity and improving system versatility.
- Designed and implemented the Clinical Indicator Database (CID), replacing ad-hoc administration with a structured relational database to improve efficiency and consistency.
- Contributed to translating complex mathematical indicator specifications into SQL pipelines, applying a data scientist's mindset to ensure accurate, compliant outputs that were further developed in the Database Specialist role.

Mushroom Advice & Analysis, Director / Laboratory Scientist| September 1999 – October 2009

- Developed a UK industry-first multivariate NIR spectroscopy model to predict compost chemistry with 98% accuracy, transforming laboratory services.
- Monitored and validated the model to maintain scientific rigour and client confidence.
- Introduced innovative IT and data solutions, cutting operational costs and improving efficiency.
- Provided scientific and data-driven insights to support consultancy services.

Professional courses

- Introduction to Microsoft Fabric – Microsoft Press (2025)
- Databricks Fundamentals Accreditation – Databricks (2024)
- Power BI Essential Training – LinkedIn Learning (2024)

Education

University of Dundee | Scotland | master's degree in data science 2014-2016
Sheffield Hallam University | UK | Bachelor of Science in Biomedical Science 1995-1999