# Louis Othen

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#### **PROFILE**

Data Scientist with over 12 years' experience in the data space, gained working in data and statistical analysis and visualisation, experimentation, data analytics, data engineering, and data science including Machine/Deep Learning, feature engineering, exploratory data analysis and predictive modeling. Hardworking, a thirst for knowledge, and always looking to explore the possible and help others. I am willing to relocate.

## **SKILLS**

- Data Science
- Machine/Deep Learning/NLP
- Predictive Modelling
- Data Engineering, DevOps
- Data Analytics
- Python, Pyspark
- SQL, SSMS, SSIS
- R, Shiny, Markdown

- Power BI, DAX, Power Query M
- Qlik Sense
- JIRA, Confluence, Bitbucket, SharePoint
- Docker, Kubernetes
- Terraform
- Microsoft Azure
- Microsoft Dynamics,
   Dataverse, PowerApps

- Databricks
- AWS, S3
- Palantir Foundry
- Git, Bash, Linux
- LLM, RAG, Ollama, Solar, Gemma.2b, OpenAl, Vector Embedding

## **EMPLOYMENT HISTORY**

Data Scientist

Community Integrated Care, Widnes, Chesire, UK

Embarked on providing part-time mostly pro-bono data expertise to assist the charity tackle the challenges with colleague retention and recruitment. Currently in process of performing exploratory data analysis (EDA) into both internal and participant survey data to provide recommendations to proceed before applying hypothesis testing, natural language processing (NLP), supervised and unsupervised machine learning and analytics methods to both predict future retention as well as provide insight into areas the organisation can investigate further.

• Technical expertise: Azure DevOps, Data Factory, DB, SQL, Python, R, PowerBI,

Data Engineer

Foot Anstey, Bristol, UK

May 2024 - Sept 2024

Sep 2024 – Present

- Led the Data Engineering function within Digital Data and Technology Directorate's Task Flow scrum team as interim lead. Independently managed and executed critical data engineering projects during organisational growth to lay groundwork for future data initiatives. Successfully delivered until establishment of an in-house committed team
- Researching LLM's for the organisation: with Azure Al Studio. Additionally, with local LLM's in Ollama, and how to develop, test, and deploy into Microsoft environment set up via Dynamics, PowerApps, and Azure firmly adopted by the organisation. Small project included employing a LLM alongside legal process documents through Naïve Retrieval Augmented Generation to assist conveyancers and other legal members with their clients.
- **Data Migration:** Successfully executed complex data migration from MatterSphere to Microsoft Dynamics, leveraging Azure DevOps, Data Factory, SQL, and Dataflows. Overcame challenges posed by the complex business landscape to deliver a critical project.
- Business Intelligence: Developed and implemented advanced Power BI dashboards, providing actionable insights into firm's operations and exposure to opportunities in future reporting and Machine Learning Capabilities. Improved data-driven decision-making by collaborating with business stakeholders.
- **Technical expertise:** Azure DevOps, Data Factory, DB, SQL, Microsoft Dynamics Power Platform, Power BI, PowerApps, and Git.

#### Operational Research Data Team Lead

Aug 2023 – Dec 2023

UK Department for Environment, Food and Rural Affairs (DEFRA) London, UK

Working for the Northern Ireland Directorate (NID), supporting the implementation of the Windsor Framework; a policy to goods moving between Great Britain and Northern Ireland, remedying complex constraints of UK and EU law since Brexit, whilst upholding the Good Friday Agreement. All work involved managing complex policies, relationships, data, and stakeholders across multiple government agencies and numerous private consultancies.

- Led high-performing team: Unexpectedly managed a team of three Data Analysts delivering critical data solutions for the Northern Ireland Directorate's implementation of the complex Windsor Framework. Successfully navigated challenges in contract management, data supply, and stakeholder engagement.
- Architected data platform migration: Spearheaded the transition from Palantir Foundry to Microsoft Azure Databricks and Synapse Analytics, ensuring seamless data migration and uninterrupted analytics.
- **Delivered actionable insights**: Provided data-driven insights to inform policy decisions and mitigate risks associated with the Windsor Framework.
- **Developed high-performing team**: Mentored and guided team members, fostering a collaborative and supportive environment.
- Technical expertise: Leveraged advanced data science, data engineering, and data analytics techniques in R, R Markdown Python, Pyspark, SQL, and cloud platforms (Palantir Foundry, Azure Databricks, Synapse, Data Factory).

Lead Data Scientist Oct 2022 - Feb 2023

UK Ministry of Defence (MOD), Submarine Delivery Agency (SDA), Bristol, UK

Within the SDA, applying Data Science to support continuous journey, transforming usage and quality of data across the organisation, and overarching MI & Data Analytics strategy. Support project Resolution team nationwide through data gathering, experimentation, analysis and modelling.

- **Built and trained data science team:** Established a new data science team to drive data-driven decision making across the organisation. Contributed to development of overarching data strategy.
- Developed predictive models: Advanced machine learning models to forecast submarine defects, optimising resource allocation, mitigating critical failures. Delivered insights to submarine commanders, operations, logistics, and supply teams.
- Pioneered Palantir Foundry adoption: Successfully implemented Palantir Foundry within the SDA, overcoming technical challenges, and training the team in its use. Established data pipelines and analytics capabilities to unlock data value.
- Mentored and developed team: Provided technical guidance, coaching, and training to the data science team, fostering a culture of continuous learning and development.
- **Technical expertise:** Demonstrated proficiency in Python, Pyspark, SQL, R, Git, and Palantir Foundry (Code Workbooks, Code Repositories, Pipeline Builder, Contour, Quiver, Object Explorer).

Data Scientist Jan 2022 - Jun 2022

UK Department of Work and Pensions (DWP), London, UK

Within the Universal Credit (UC) Data Science, designing, experimentation, and performing data science and analytics for the UC Digital service. Full project life cycle involvement from gathering data, to explaining to a non-technical audience.

- Led data science efforts: Served as principal Data Scientist in a multidisciplinary team contributing to the RESTART initiative, aimed at reintegrating UC claimants into the workforce.
- **Developed predictive models:** Utilised NLP, topic modeling, and unsupervised machine learning to match claimants with suitable training programs, enhancing program effectiveness.
- **Uncovered significant fraud:** Involved in a critical fraud investigation, identifying millions of pounds in potential fraudulent UC payments. Findings were instrumental in informing targeted interventions.
- Enhanced data-driven decision making: Collaborated with business stakeholders to translate complex data insights into actionable recommendations.
- **Technical expertise:** Demonstrated expertise in Python, Pyspark, R, SQL, AWS (Databricks, S3, Glue, Sage maker), Azkaban, Qlik Sense, Git, and Atlassian tools.

## Data Scientist / Data Consultant

Oct 2021 - Dec 2021

Transparity, Ferndown, Dorset, UK

Within a new Data Practice, collaborating with clients to create data science, analytics, engineering and architecture solutions, Using the Microsoft Azure suite of services including Databricks, Data Factory, DevOps and Synapse.

- Supported clients in implementing Microsoft Azure data solutions (Databricks, Synapse Analytics, DevOps, Data Factory, Data Lakes) through data science, engineering, and analytics.
- Proficiency in SQL, Python, Terraform, and Power BI (DAX, Power Query M).

Data Scientist Sep 2019 - Sep 2021

Zurich Insurance, Fareham, Hampshire, UK

In UK Predictive Analytics, my role consists of developing data driven solutions for difficult business challenges towards research and development, proof of concepts, as well as insurance risk mitigation. This included projects such as using deep learning algorithms to predict grade listed status of properties in the UK, as well as processing Companies House data that would have taken over 9 years to do by hand.

- Pioneered predictive models: Developed proof-of-concept models to predict listed building status, and commercial risk mitigation. Leveraging advanced techniques like Natural Language processing (NLP) topic modeling, Neural Networks, and XGBoost. Deployed an R Shiny application for stakeholder insights.
- Revolutionized data processing: Senior member of staff from a data engineering perspective. Algorithmically
  processed vast Companies House data in three days, compared with nine years manually, improving efficiency by
  99.9088%.
- Mentored data science team: Provided guidance and support to junior team members in methodologies, programming, and best practices.
- **Technical expertise:** Demonstrated proficiency in Python, Pyspark, SQL, R, JIRA, Bitbucket, Confluence, Azure cloud technologies (Databricks, Spark, Data Factory, Data Lakes, SQL DB, DevOps), Linux.

## Data Engineer / Data Developer

Nov 2017 - Sep 2019

Zurich Insurance, Fareham, Hampshire, UK

Working in the Data Architecture and Analytics team, my role was to design, construct, test and deploy ETL Data pipelines from various sources into progressive and live server environments, with associated DBA activities.

- Monitor and review existing management information: Investigate data, processes, and practices to Identify anomalies and ensure management and internal clients has access to up to date and accurate information.
- Analyse operational data: Make recommendations to support department's decision-making processes.
- Mentorship of junior developers: Programming, guidance, methods, and best practice.
- Lead DBA of legacy server infrastructure: successful management, deployment and migration from old to new onpremises server architecture.
- Technical expertise: SQL, SAS, SSIS, MS Access, VBA, Git, Jira Confluence, Bitbucket.

Data Analyst Jan 2017 – Nov 2017

Computershare, Bristol, UK

As part of the future investment team, I collaborated with internal stakeholders to ensure timely, reconciled client reports and analysis. Supported product development, defining requirements, and conducting user acceptance testing. Implemented data process improvements. Key achievements include leading a £22 million project in stock and shares analysis. Additionally, played a crucial role in overnight data migrations between the team and colleagues in Australia.

• Technical expertise: SQL, MS Excel, VBA, MS Access, SSIS, SCRIP Mainframe.

## SCADA Configuration Technician

Oct 2016 – Jan 2017

South West Water, Exeter, Devon, UK

Working on an assignment for the iOPS Alarm Optimisation Project. Working for the Wholesale Technical Support Services and working with the current members of the SCADA Configuration Team.

- Working on sewage pumping systems flow meter configuration to support management of environmental impact through failed assets.
- Support initiatives that agreed at the Alarm Strategy and Governance Group.
- Dealing with field-based operators from central office, building data fields in network areas.
- Analysing configuration data on and off the SCADA system (Artisan), highlighting any discrepancies to prevent future risk.
- Technical expertise: SCADA systems, PSTN and microwave radio, MS Excel and SQL (Queries, Tables, Views, Stored Procedures).

## Management Information Analyst

Jun 2016 - Oct 2016

KCOM, Exeter, Devon, UK

Providing MI reporting, Data Modelling and Analysis for Senior Managers, Stakeholders and other business Users of Calls, Ticket and Online Chat data.

- Gathering requirements for requests and developments of new and or existing MI reporting and visualisations.
- Presenting reports and communicating business logic to users at all levels of the business.
- Technical expertise: SQL, MS Excel, PowerPivot, PowerBI, DAX, Power Query M and SharePoint.

#### Information and Performance Analyst

Devon Partnership NHS Trust, Exeter, Devon, UK

Responding to ad-hoc report requests of performance information. Producing, maintaining, and developing regular reports for the entire Trust, to monitor performance against national and local targets.

- Identifying and recording data quality issues as well as supporting staff / teams in improving data quality issues.
- Design, develop and automate data extraction and analysis, facilitating reports for managers and clinicians to support clinical, business, and operational needs of Psychology and Psychological Therapy Services.
- Provide development feedback to providers of Improving Access to Psychological Therapy monitoring providers.
- Technical expertise: SQL, SSIS, Microsoft Excel, Access, SharePoint.

#### **Prescribing Information Analyst**

Aug 2015 - Jun 2016

Nov 2015 – Jun 2016

Devon Partnership NHS Trust, Exeter, Devon, UK

Working within the Medicines Optimisation Team, providing pharmacy prescribing information and analysis of each directorate from complex prescribing information systems, to show drug related cost and volume data into reports to inform decision making processes relating to Medicines Optimisation and prescribing.

- Maintain prescribing systems such as ePACT.net, Hospital Pharmacy Analysis System (HPAS), Abusable Drugs Investigational System (ADIoS).
- Produce analytical reports on medicine related incidents reported on the risk management system.
- Collaborating with Associate Director of Medicines Optimisation, alongside pharmacists and technicians to develop and implement required items for pro-active analysis, assessment, and investigation of routine and controlled drugs.
- Technical expertise: SQL, MS Excel, SSIS.

# Systems Support Officer

Feb 2014 – Aug 2015

Southwestern Ambulance Service NHS Foundation Trust, Exeter, Devon, UK

Reporting to the Business Systems Manager and consulting with System Development Managers, my position was to carry system and user configuration on ambulance dispatch system C3. Manage and maintain warning marker information, which include distressing and emotive issues requiring analysis. Extraction and analysis of status planning data from C3 and other areas as required.

- Conducting requests for user, ambulance, and radio configuration, whilst maintaining relevant databases
- Monitoring team email, post, and team phone line for requests. This included dealing with emotional and distressing requests where resilience required to act accordingly.
- Consulting with the rest of the trust for further requests or actions.
- Assist in maintaining records and filing systems, identifying issues that need immediate corrective action, or liaise with the A&E System Development Manager to discuss and resolve.
- **Technical expertise**: Excel (Tables, Pivot Tables, Charts, Formulas and Lookups), C3 dispatch System ICCS Radio configuration.

## **EDUCATION AND CERTIFICATIONS**

Title	Institution	Date Obtained
MSc Computer Science & Big Data Analytics – Distinction	Wrexham University	May 2024
Generative AI for Data Scientists	IBM Coursera	May 2024
DevOps Engineering	AiCore	Jan 2024
Generative AI Fundamentals	Google Cloud	Sep 2023
Advanced Data Analytics Certification	Google Coursera	Aug 2023
Data Analytics Certification	Google Coursera	Feb 2023
Certificate in Data Science – Distinction	University of Winchester	Aug 2021
Azure Al Fundamentals	Microsoft	Aug 2021
Azure Data Fundamentals	Microsoft	Jul 2021
Level 4 Data Analyst Apprenticeship	Firebrand Training	Jun 2020
Data Science Associate	DELL EMC	Aug 2019
Level 4 Diploma Data Analysis Concepts	BCS	Jun 2019
PRINCE2 Foundation Certification	AXELOS	Oct 2016
ITIL Foundation in Service Management	QA	Aug 2016