

Curriculum Vitae

Dr Derek A. Colley

Ph.D, M.Sc., Pg.Dip., Pg.CHPE, B.Sc. (Hons) FHEA

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*20 years+ experience | Data engineering, architecture, consultancy, administration, and leadership |
Expert data knowledge across most major technologies | Cloud and on-premises solutions |
Certified in AWS, Microsoft and Oracle | Ph.D in database systems | Based in Manchester, UK*

About

Derek Colley is an experienced data professional, expert in database administration (MS SQL Server, Oracle, PostgreSQL and MySQL), data architecture (UML, ERDs, CODAs), SQL (multiple dialects including T-SQL, PL/SQL) and BI development (ADF, Synapse, BML, SSIS, SSAS, SSRS, Power BI, etc.), data engineering (ETL in Azure including Fabric, Databricks, AWS stacks inc. AWS Glue, on-premises inc. SSIS, SAP Data Services) and data analysis (SQL, Python), with a strong understanding of ISO 27001, data governance and compliance, data mapping and database forensics.

As an expert with more than two decades of industrial experience, he has worked for a large variety of UK and international clients and his prominent achievements include repeated senior leadership of data-oriented business units, multiple in-flight migrations of enterprise systems on-premises to cloud, design, construction and delivery of complex data warehouses for high-profile clients, and expert consultancy delivering hands-on improvements to enterprise data infrastructure.

Derek currently works for and manages Global Technologists Ltd., a specialist consultancy supplying both his own expertise and that of talented partnered data professionals to a variety of business clients.

Experience

Managing Director, Global Technologists Ltd. (Oct. 2023 – Present)

Leading a technical consultancy in Greater Manchester focused on providing data-centric solutions to businesses across the UK. Current client names are redacted for reasons of commercial sensitivity.

Clients/Contracts:

Data Consultancy: <<Scottish Government partner>>, Dec 2024 – Present

Remit: Data architecture, warehouse and ETL implementation in AWS RDS, Apache NiFi and Neo4j.

Key achievements: Complete redevelopment of a medallion architecture and greenfield data warehouse in AWS.

Data Engineering: <<Commercial credit referencing company>>, Sep 2024 – Present

Remit: Leading the data team at a flagship B2B SaaS data and fintech company in Manchester.

Key achievements: Built and led a team of 4; ETL and warehouse architecture; migration from Azure Fabric to Databricks.

Data Architecture: <<Public sector regulator>>, Jan 2024 – Present

Remit: Data modelling and architecture; designed a new data warehouse, transitioning from SAP to Azure Synapse.

Key achievements: Complete remodel of hundreds of source database tables to new architecture.

Data Engineering: EMG/Gravity Media, Apr 2024 – May 2024

Remit: Urgent short-term project to implement M365 CRM schemata to a new data warehouse in Azure.

Key achievements: Architected ETL flows and completed mapping from multi-lingual homomorphic DBs to warehouse.

Subject Matter Expertise: EC Council International, Jan 2024 – Mar 2024

Remit: Production of a 10-part advanced training course in database digital forensics.

Key achievements: Over 30 hours of video-led content created and delivered to hundreds of international students.

Database Administration: Foreign and Commonwealth Development Office (FCDO), Dec 2023 – May 2024 [SC]

Remit: Database administration in a secure database ecosystem.

Key achievements: Created and led on audit policy and implementation within an established governance framework.

[PT] **Trade Journalist**, Edgewood Solutions (periodic: 2017 – Present)

Remit: Commercial production of a variety of professional-grade technical articles on Microsoft SQL Server and ecosystem.

Key achievements: 34 articles published to date with several hundred thousand views from US and international visitors.

[FTC] **Senior Engineer & Technical Lead**, UrbanChain. (Jun 2023 – Dec 2023)

Remit: Building a software development and data engineering team from the ground up for this B2B energy startup.

Key achievements: Assembled a team of 9; built brand-new billing system based on PostgreSQL; implemented new CRM system.

[PT] **Lecturer & Senior Research Fellow**, Staffordshire University (Sep 2019 – Aug 2023)

Remit: Postgraduate teaching and research activities for the University, and professional consultancy for industry trade partners.

Key achievements: Taught over 300 students, including supervisory duties and marking; designed and implemented module content.

[FTC] **Senior Data Engineer (Senior Manager)**, Cognizant (Jul 2022 – Jun 2023) [SC]

Remit: Leading a team of 6 and participating in implementation teams providing business intelligence using AWS, Pentaho to HMRC.

Key achievements: Delivered several successful milestones within long-running projects for Customs & Excise.

[PT] **Tutor**, OpenClassrooms Inc. (Jan 2023 – Jun 2023)

Remit: Teaching Python, SQL and Tableau on a one-to-one basis for this international education agency.

Key achievements: Designed new course content and taught around a dozen students, with many achieving excellent outcomes.

[PT] **Data Engineer**, IBM United Kingdom (Dec 2022 – Jun 2023) [SC]

Remit: AWS support for IBM for their client (Home Office), administering database systems (SQL Server, PostgreSQL) and consultancy.

Key achievements: Implemented CloudFormation database migrations and rollout to new staging, preproduction and production.

[FTC] **Lead Database Administrator**, PSI / Lifelong Learning Holdings Ltd. (Jan 2019 – Jul 2022)

Remit: Taking the helm of the data team for the “Life in the UK” test (Home Office); IBM DB2, AWS RDS (SQL Server) administration.

Key achievements: Successful migration of data services from on-premises to AWS; performance tuning for 200k concurrent users.

[PT] **KS2 – KS4 Tutor**, Self-employed (Jan 2018 – Nov 2020)

Remit: One-to-one teaching of the KS3 and KS4 English, Mathematics and Computer Science National Curriculum.

Key achievements: Several students achieving equivalent grades A and B in taught subjects.

[FT] **Managing Director**, Optimal Computing Ltd. (Feb 2011 – Jul 2019)

Working as a self-employed data contractor in various roles including administration, engineering and architecture.

Clients/Contracts:

Data Consultant: Seatriever, May 2019 – Jul 2019 – SSIS and Power BI

Database Administrator: Car Finance 247, Sep 2018 – Jan 2019 – Leadership, on-premises SQL Server, Azure DB

Lead Database Administrator: Zuto, Apr 2018 – Sep 2018 – Leadership, AWS RDS, Aurora DB, Glue

Database Administrator: Davies Group, engagements in 2014, 2017 and 2018 – On-premises SQL Server, Power BI

BI Developer (SSAS): CGA Strategy, Oct 2017 – Jan 2018 – SSAS, cubes, DAX, MDS

Database Consultant: Utiligroup, Mar 2017 – Oct 2017 and Sep 2015 – Dec 2015 – SQL Server, SSIS, SSRS, Power BI

Data Consultant: Storengy (Engie), Jan 2016 – Sep 2016 – InfoPath, SQL Server, XML APIs, SSRS

Database Administrator: Beauty Bay, May 2016 – Aug 2016 – Dynamics 365, Azure DB

Data Consultant: Optima Consultancy, Dec 2015 – Apr 2016 – SSRS, Python

SQL Consultant: Ascribe (EMIS Health), Jan 2015 – Sep 2015 – SQL Server

Database Administrator: TDX Group, Sep 2014 – Jun 2015 – SQL Server

Database Administrator: TSYs Managed Services, Jun 2014 – Sep 2014 – SQL Server

Database Administrator: G4S Care & Justice Services, Jan 2014 – Apr 2014 – SQL Server, Oracle

Database Administrator: Chester West & Cheshire Council, Sep 2013 – Jan 2014 - SQL Server, SCIM

Systems Engineer: Middlewich High School, Nov 2013 – Dec 2013 – SIMS, reporting

Field Engineer: Salford Royal NHS Foundation Trust, Feb 2011 – Aug 2011 – Oracle, NHS systems e.g. PAS

[PT] **Managing Director**, Think of IT Solutions (UK) Ltd. (Oct 2015 – Aug 2017)

Partner and joint owner of a software and data consultancy aimed at serving public sector clients.

[FTC] **Database Administrator**, Laterooms Group (Sep 2012 – Sep 2013)

Remit: Database administration of a high-transactional SQL Server on-premises environment for a busy B2C SaaS supplier

Key achievements: Migrated on-premises to Azure including upgrades; installation and support of brand-new PCI-e Fusion IO

[FTC] **Lead Database Administrator**, Calyx Managed Services (Sep 2011 – Sep 2012)

Remit: Data leadership for the clients of this Managed Services Provider (MSP); including British Red Cross, FSB and others

Key achievements: DBA, data quality and security management of data ecosystems for MSP end-clients.

[FTC] **Technical Lead**, IBM United Kingdom (Dec 2006 – Feb 2010)

Remit: Database administration (SQL Server) and cybersecurity policy, seconded to DEFRA, AstraZeneca and Capital One

Key achievements: Promoted from IT Specialist (graduate) to Technical Lead within 3 years. Cross-trained Oracle to SQL Server.

Qualifications

Postgraduate Certificate in Higher and Professional Education (PgCHPE); Fellow, Advance HE (Jun. 2023)

This qualifies me as a teacher within Higher Education institutions in the UK.

Doctor of Philosophy (Computing Science) (Ph.D) (Jun. 2021)

Topic: Relational database performance optimisation.

Over six years I forked and rebuilt parts of the PostgreSQL engine to use intelligent query parsing and matching resulting in a 13-15% performance improvement, published five academic papers and presented my research several times at conference.

Master of Computing (M.Sc) (Jun. 2017)

Topic: Improving database security in relational database management systems.

Postgraduate Diploma in Information Security and Digital Forensics (Pg.Dip.) (Sep. 2016)

Focus on ISO27001 and related standards; digital forensics, infosec and security risk management.

Took specific training as a digital forensics investigator.

Bachelor of Computer Science with Honours (B.Sc. with Hons) (Jun. 2006)

First degree encompassed multiple modules including software programming, data and so forth.

Certifications

Training: Microsoft Fabric (via Andy Leonard) (2024)

AWS Certified Cloud Practitioner (2022)

Microsoft Certified Professional (SQL Server) (2014)

Oracle Certified Associate (RAC/Streams) (2008)

Directorships and Memberships

Director, Global Technologists Ltd. (Oct. 2023 - Present)

Director, Optimal Computing Ltd. (Jun. 2011 – May 2023)

Director, Think of IT Solutions (UK) Ltd. (Oct. 2015 – Aug. 2017)

Editorial Review Board Member, IGI Global International Journal of Business Intelligence Research

Fellow of Advance HE (2022)

Publications

9 academic publications and 34 trade press articles, full list available at <https://www.derekcolley.co.uk/papers.htm>
