

Curriculum Vitae

Dr. Derek A. Colley

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

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*17 years of experience | Data engineering, architecture, consultancy, administration, leadership
Active SC clearance to 2029 | Counter-Terrorist Check Clearance (CTC) | Enhanced DBS checked
Manchester-based, can travel, on-site/hybrid/remote | No visa requirements | Short notice period*

Experience

Senior Data Engineer & Technical Lead – Urbanchain Ltd. (Jun. 2023 –)

ETL pipelines, data modelling, data analysis and development, architecture. Leader of a team of 8.

Tech: AWS RDS, SQL, MongoDB, AWS S3, Python, AWS Lambda, AWS Glue, JIRA, REST APIs, CI/CD, Agile.

Senior Data Engineer (Senior Manager) – Cognizant Worldwide (Jul. 2022 – Jun. 2023) (SC CLEARED)

Governance and management, consultant-level technical expertise, architecture. Led a team of 9.

Tech: AWS RDS, Denodo, Pentaho BI, SQL, Qlik, Power BI, MySQL, PostgreSQL, Microsoft SQL Server.

Lead Database Administrator (DBA) – Lifelong Learning Holdings Ltd. (Jan. 2019 – Jul. 2022)

Head of data for UKVI subsidiary. Data management and governance. Part of a team of 8.

Tech: Microsoft SQL Server 2019, AWS RDS, MySQL, Power BI, ETL pipelines, AWS Glue, IBM DB2.

Lead Database Consultant & Managing Director – Optimal Computing Ltd. (Feb. 2011 – Jul. 2019)

Various short-term/recurring client contracts, roles as detailed.

Seatriever Ltd. (May 2019 – Jul. 2019) – Retail. P-T/adhoc. Tech: SSRS, Python, reporting, Power BI, analysis.

Car Finance 247 (Sep. 2018 – Jan. 2019) – E-commerce. Tech: Agile, MSSQL, Azure, AWS RDS, DynamoDB.

Zuto (Apr. 2018 – Sep. 2018) – E-commerce. Team leader, 5 DBAs. Tech: MS SQL, AWS RDS, Tableau.

Davies Group (Jan. 2018 – Apr. 2018) - Insurance. Tech: MS SQL, data warehouses, SSIS, SSRS.

CGA Strategy (Oct. 2017 – Jan. 2018) – Distribution. Tech: MS SQL, SSAS, DAX, cubes, warehousing.

Utiligroup (Mar. 2017 – Oct. 2017) – Energy (electricity). Tech: MS SQL, Oracle, Python, C#, ETL.

Davies Group (Sep 2016. – Jan. 2017) – Insurance. Tech: MS SQL, data warehouses, SSIS, SSRS.

Storengy (Engie) (Jan. 2016 – Sep. 2016) – Energy (gas). Tech: MSSQL, Azure, XML, .NET, SSIS, SSAS.

Beauty Bay (May 2016 – Aug. 2016) – Retail. Tech: Dynamics CRM, Azure DB, MS SQL, ETL.

Optima Consultancy (Dec. 2015 – Apr. 2016) – Finance. Tech: Python, ETL, MS SQL, SSRS, Power BI.

Utiligroup (Sep. 2015 – Dec. 2015) – Energy (electricity). Tech: MS SQL, Oracle, Python, C#, ETL.

Ascribe (EMIS Health) (Jun. 2015 – Sep. 2015) – Healthcare. Tech: MS SQL, DBA work, T-SQL.

TDX Group (Sep. 2014 – Jun. 2015) – Fintech. Tech: MS SQL, architecture, T-SQL, SSIS, SSAS, SSRS.

TSYS Managed Services (Jun. 2014 – Sep. 2014) – Technology. Tech: MSSQL, Oracle, T-SQL, PL/SQL.

Davies Group (Apr. 2014 – Jun. 2014) – Insurance. Tech: MS SQL, data warehouses, SSIS, SSRS.

G4S Care & Justice Services (Jan. 2014 – Apr. 2014) – Security. Tech: MSSQL, Oracle, DBA, analysis.

Chester West & Cheshire Council (Sep. 2013 – Jan. 2014) – Local government. Tech: MSSQL, SCOM.

Middlewich High School (Nov. 2013 – Dec. 2013) – Education. Tech: SQL, general IT, SIMS, networks.

Salford Royal NHS (Feb. 2011 – Aug. 2011) – Healthcare. Tech: Oracle, HP Openview, field engineering.

Database Administrator – Laterooms Group Ltd. (Sep. 2012 – Sep. 2013)

One of two DBAs with a market-leading hotel and travel booking service.

Tech: Microsoft SQL Server, Power BI, SQL Server Integration Services, SSRS, SSAS, cubes, DAX.

Database Administrator – *Calyx Managed Services Ltd. (Sep. 2011 – Sep. 2012)*

Sole DBA for a managed service consultancy, clients included the FSB, British Red Cross and others.
Tech: Oracle 9i & 10g, Microsoft SQL Server, PostgreSQL, MySQL, SOC monitoring, Splunk.

Global Technical Lead, Oracle DBA – *IBM United Kingdom Ltd. (Dec. 2006 – Feb. 2010)*

Originally an Oracle DBA, promoted to a Global Technical Lead (cybersecurity).
Tech: Oracle 8i, 9i, 10g, INGRES, PostgreSQL, ISO27001 controls, risk management, C#, Python.

Other Projects

Data Engineer – *IBM United Kingdom Ltd. (Dec. 2022 – Jun. 2023) (SC CLEARED)*

Secondary contract support (inside IR35) as Data Engineer for the Home Office via IBM.
Tech: AWS RDS, AWS CloudFormation, CI/CD, Azure DB, Azure Data Factory, T-SQL, ANSI-SQL.

Lecturer, Module Leader & Senior Research Fellow – *Staffordshire University (Sep. 2019 – Aug. 2023)*

Part-time lecturing, marking and supervision. Built a data warehouse for an NHS project (Azure).
Skills: Small- and large-group teaching, stakeholder comms, attention to detail, multitasking.

Tutor – *OpenClassrooms (Jan. 2023 – Jun. 2023)*

Part-time remote teaching and supervision to a variety of international students.
Tech: Python, SQL (PostgreSQL).

KS2-KS4 Tutor – *Self-employed (Jan. 2018 – Nov. 2020)*

Part-time one-to-one and small-group teaching for ages 7+ to GCSE. Maths, English, the sciences.
Skills: Communication, planning, teaching. Taught GCSE Computer Science to two students.

Trade Journalist – *MSSQLTips.com (periodic, 2017 – 2021)*

Professional commercial moderated tutorials and tips on popular website <https://www.mssqltips.com>.
Skills: Writing and presenting, Microsoft SQL Server and related topics. [Author link](#).

Education

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. I forked and rebuilt parts of the PostgreSQL engine.

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.

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

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

Professional Certifications

Fellow of Advance HE (2022)

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)

Member – Advance HE (formerly the Higher Education Academy) (May 2023 – Present)

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

Member in good standing – St. James' Club, Spring Gardens, Manchester

Former Member of the BCS (CITP) and IEEE organisations (2011 -, various).

Publications

Colley, D. and Asaduzzaman, M., 2022. *An improved method of delta summation for faster current value selection across filtered subsets of interval and temporal data*. arXiv preprint arXiv:2211.05896. [Link](#)

Colley, D., 2021. *Development of a Dynamic Design Framework for Relational Database Performance Optimisation*. Doctoral thesis. Staffordshire University. [Link](#)

Colley, D. and Asaduzzaman, M., 2021. *Construction and Performance Analysis of a Groomed Polarity Lexicon Derived from Product Review Source Datasets*. 11th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS 2021), pp. 875-880, doi: 10.1109/IDAACS53288.2021.9660838. [Link](#)

Colley, D. and Asaduzzaman, M., 2021. *A Novel Method for Calculating Query Hashes for Improved Query Grouping in Relational Database Management Systems*. Springer Nature - Book Series: Transactions on Computational Science & Computational Intelligence (and 21st International Conference on Information and Knowledge Engineering). In press. [Link](#)

Colley, D., Stanier, C., and Asaduzzaman, M., 2020. *Investigating the Effects of Object-Relational Impedance Mismatch on the Efficiency of Object-Relational Mapping Frameworks*. Journal of Database Management, vol. 31, issue 4. [Link](#)

Colley, D., Stanier, C. and Asaduzzaman, M., 2018. *The Impact of Object-Relational Mapping Frameworks on Relational Query Performance*. International Conference on Computing, Electronics & Communications Engineering 2018 (ICCECE '18). [Link](#)

Colley, D. and Stanier, C., 2017. *Identifying New Directions in Database Performance Tuning*. Procedia Computer Science, vol. 121, pp.260-265. [Link](#)

Colley, D., 2018. *Improving Database Security for Relational Database Management Systems*. Master's thesis, Open University, UK. [Link](#)

Colley, D., 2006. *An Improved Image Recognition System for use in Bomb-Disposal Robotics*. Bachelor's dissertation, Brunel University, UK. [Link](#)

+ 32 trade press articles for mssqltips.com: [Author link](#)

Excellent references available on request.
