

ADRIAN NG

Junior Metadata Engineer at IAG Cargo

Email: contact@adrian.ng **Website:** adrian.ng **Location:** Harrow

EDUCATION

Royal Holloway
Data Science & Analytics

2017 **King's Collge London**
Mechanical Engineering

2010

CODING

TOOLS

- Master of Science

- Pass with Distinction

- Department of Computer Science

- Bachelor of Engineering

- Upper Second Class with Honours

- School of Engineering

- T-SQL, PLSQL

- Powershell

- Python

- Java (postgrad)

- VS Code

- DBeaver

- Git

- Markdown

IAG CARGO

Junior Metadata Engineer

Data Platform Team

June 2019 - Present

Prototype Implementation
PL/SQL

Implemented data processes originally prototyped by Data Exploitation team in Alteryx/Tableau

- Achieved computational efficiencies where possible:
 - Computed *directed network graphs* using **CROSS JOIN** and recursive in-line queries.
 - Made use of *materialized views* and *global temp tables* to cache datasets
 - Utilized PL/SQL as a functional language with table-valued functions.
- Specified standards for Data Exploitation team to follow (documentation, UAT evidence, naming conventions, ownership)

Self-Service Data Ingestion
Python, Powershell

Built an automated data ingestion service enabling Data Analysts to set up their own data pipelines.

- Utilized by Data Exploitation team across numerous projects.
- Time-series analysis used to visualize undesirably large or small imports in Tableau.
- Provided documentation on: – local/remote(RDP) installation – **yaml** configuration

Sales Relational Model
Oracle

Modelled the relationship between entities: sales agent/customer/location

- Established pipeline between Business Managers (upserts) and Data Analysts (dashboards)
- Relational design enabled efficient ETL automation, constant uptime and immediate retrieval.

Training & Documentation
Markdown

- Prepared training materials and hosted workshops for analysts on SQL fundamentals
- Part of editorial committee to establish an internal Wiki. Conducted interviews for content.
- Produced documentation on edge-case and greenfield subject matter:
 - XML parsing in Oracle
 - SSHing to remote Python environment
 - Metadata Management (for non-technical C-level audience)

MANCHESTER CITY FOOTBALL CLUB

Data Analyst

Fan Relationship Management

Jan. - July 2018

NYCFC ETL
Project Owner

Integrated New York City FC data into our analytical warehouse. Six-month project covering data discovery, analysis, engineering. Multiple data sources were involved: • NYCFC • Ticketmaster • Salesforce • Major League Soccer

Data Pipeline

- built pipeline ingesting data from multiple databases, replacing *Informatica* solution
- achieved speed improvements using efficient DML & DDL (**OPENQUERY**, **MERGE**)

Data Cubes

Storing analytical datasets in *Data Cubes* achieved

- up-stream computation of all drill-down/roll-up levels and **GROUP BY** permutations
- reduction in size of dataset, minimising bandwidth across distributed servers
- improved user-experience in *Tableau* front-end

Training

Dedicating time to training junior colleagues remotely in Manchester/New York

- organised weekly workshops teaching basic DML and advanced DDL

[git] • Release: June 16, 2020 • Latest: adrian.ng/cv

- developed additional material on my website to supplement these workshops
- aimed towards self-sufficiency in writing database queries/stored procedures

GDPR Pipeline Technical Lead

- integrated new GDPR schema into existing datastores (*SQL*, *Salesforce*)
- provide schema specification to **SQL** developers, advocating for indexable data types
- built efficient **MERGE** process featuring relational database design
- implemented a process to wipe personalised data belonging to any non-consenting individual stored in our data-warehouse

CREATOR (NOW INSPIRED THINKING GROUP)

Senior CRM Campaign Executive

SQL Development

Dec. 2013 - Sept. 2016

I developed a number of **SQL** processes to transform customer data into CRM segments. On occasion, I took responsibility for resourcing and managing the team's workload in *Jira*.

Virgin Media Segmentation

Built a flexible segmentation process able to accommodate the numerous VM mailings and myriad ad-hoc configurations.

adrian.ng/SQL/recursion
adrian.ng/openquery-xml

- wrote a flexible import process to efficiently ingest millions of tuples distributed across multiple flat-files, gaining time-savings over the built-in import wizard
- achieved efficient joining of local and remote tables via use of **OPENQUERY**, **XML**, dynamic **SQL**
- implemented efficient regex parsing via recursion, producing a one-to-many tuple mapping