Adrian Ng, MSc.

Junior Metadata Engineer at IAG Cargo
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Profile

*NB. I am **not job-hunting**. May this document simply serve to give you an idea of what I'm about professionally.*

I am a *Junior Metadata Engineer* at IAG Cargo, an airline based at Heathrow. I have just started my job here but I will be building data pipelines and working with big-data technologies.

Content to keep this section rather sparse for now…

- Adrian

Education

Royal Holloway 2017
Data Science & Analytics

- Master of Science
- Pass with Distinction
- Department of Computer Science

King's Collge London 2010
Mechanical Engineering

- Bachelor of Engineering
- Upper Second Class with Honours
- School of Engineering

Languages

- Java 8
- T-SQL

Software

- IntelliJ IDEA
- MS SQL Server
- VS Code
- Git
- Jira
- Maven
- WSL

IAG Cargo

Junior Metadata Engineer	*Data Platform Team*	*June 2019 - Present*

- I have just started my job here. I probably wont be updating this section (publicly) for many years.

Manchester City Football Club

Data Analyst	*Fan Relationship Management*	*Jan. - July 2018*

NYCFC Data Integration
Project Owner

Integrated New York City FC data into our analytical warehouse. Six-month project involving 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

Mentoring
Dedicating time to mentoring junior colleagues remotely in Manchester/New York
- organised weekly workshops teaching basic DML and advanced DDL
- 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

Customer Churn Model
Modelling MCFC/NYCFC customers' future propensity to churn via *logistic regression*.
- contributed to feature selection via: − data extraction − imputation − normalisation − `R` modelling
- researched alternate models (e.g. *Beta-Geometric/Beta-Bernoulli*), academic papers, `R` APIs

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

adrian.ng/SQL/recursion

adrian.ng/openquery-xml

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

- 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

Volkswagen Onboarding

Worked with `.NET` developers and project managers to on-board a new client.

- built and tested a new process for segmenting email *and* SMS from scratch
- provided schema specification to developers for data warehousing

TUI Redesign

Collaborated with TUI to integrate a new, responsive design for *Thomson* and *First Choice* large deployment broadcasts (5M+ recipients)

- wrote `TCL` scripts for dynamic `HTML` merges and gained efficiencies by moving expensive operations upstream
- provided testing; gave feedback; managed expectations on technical feasibilites
- gained recognition with client and was awarded at the end of this three-month project