



**JACK WELSH**

**Big Data Engineer**

## ABOUT ME

My interest in a career within technology started when I was 16 years old during my first job as a junior engineer at LANZ Ltd, building computers as ordered by the client. Since then, I strived to develop my skills in all things data and technology based.

This continued during my time at Tesco when I taught myself python and SQL using the website Data Quest with the purpose of moving into a more data focused role. At the same time, I also self-studied and qualified up to CIMA operational level to develop my business acumen.

In addition to my professional development, I have grown my team building and leadership skills by running team meetings, setting up team days and assisted in facilitating development days for my colleagues which aimed at improving presentation and excel capabilities.

In my spare time, I enjoy cycling and running, reading and DIY engineering projects, and am currently working on a drawing robot.

## CONTACT US

**Kubrick Group**

**T: 020 3866 4620**

**E: consultants@kubrickgroup.com**

**W: kubrickgroup.com**

## OVERVIEW

I completed my MSc degree in Biomedical Engineering with Neurotechnology from Imperial College in 2015. During my MSc, I started to understand potential of data while covering various machine learning techniques such as logistic regression, dimensionality reduction, support vector machines and decision trees and how these were being used commercially to drive real value in businesses. Success within the subject, combined with a genuine excitement about the advantages that well processed data provides drove me to develop a career within the sector. After university, I started working at Tesco PLC as a financial analyst and having gained commercial experience within financial reporting and control at Tesco for two years, Kubrick was a natural next step and has given me the opportunity to grow my skill set beyond finance and into an all-round data professional.

## WORK

### DATA ENGINEER - KUBRICK GROUP - LONDON

**September 2017 - Current**

At Kubrick Group I gained knowledge and real world experience in professional skills, a wide yet in depth array of modern technical and analytic skills. We studied the agile software development lifecycles and gained detailed knowledge of platforms and infrastructure. I specialised in Data Engineering which involved learning and developing advanced skills in Python, Spark, Hadoop, NoSQL and SQL as well as advanced Excel - these lead me to work towards accreditation as a Cloudera Hadoop CCA Developer.

As a junior data consultant I applied my skills on real client projects including:

- Seasonality correlation to sales for a large retail client.
- Feature analysis for a large financial services client providing HR with churn rate modelling against different employee profiles.

The projects were developed in agile teams using Git and Kanban boards following agile processes in the presence of an agile coach. Delivery of the projects used virtual environments and Docker. The professional skills I have acquired and matured were invaluable in these projects.

### FINANCIAL ANALYST – TESCO PLC, WELWYN GARDEN CITY

**2015 - 2017**

I spent two years at Tesco PLC working as an analyst, first within the e-commerce FP&A team in a management reporting role and after in a control position within the distribution business. My roles involved delivering incisive management information to help the business make fully considered decisions. Some key examples of this work include managing distribution's annual focused stock take, overhauling the periodic operating lease reporting process and bringing forward the submission date for the report by two days whilst producing insight down to lease level. I also worked with the distribution data team to produce a cost per case analysis to assess profitability of delivering to each store in the UK.

**Software used:** Oracle and HFM

## EDUCATION

### IMPERIAL COLLEGE LONDON, MSC BIOMEDICAL ENGINEERING WITH NEUROTECHNOLOGY

**2014 - 2015**

In my time at Imperial, I completed modules in statistics and data analysis, medical device certification, image processing, brain machine interfacing and machine learning with neural computation. During my studies, I received a lab prize for my work in sensory neural coding and produced a proportional shape memory alloy actuator for applications in key-hole surgery for my thesis.

### UNIVERSITY OF LIVERPOOL, BENG INTEGRATED ENGINEERING, 2:1 (HONS)

**2011 - 2014**

Modules taken included materials processing, electronic and optical device materials, additive manufacturing, lasers in engineering, thermodynamics, composite material, advanced modern management and materials design. My final year project consisted of the conception and design of a fully internal urinary catheter medical device. This involved generating a number of models of the device, including thermal and stress analysis for different materials to establish the viability of their use in the final design.

## KEY SKILLS

### Python Libraries:

Pandas, Numpy, SK Learn, NLTK, PyMongo and Plotly

### Cloudera Hadoop version 5.4:

HDFS, Yarn, Sqoop, Flume, Avro, Parquet, Impala, Hive and Hue

### NoSQL:

MongoDB, Neo4J

### SQL:

SSIS, Lavastorm, Advanced SQL

### Apache Spark:

RDD, DataFrames, SparkSQL, PySpark with some exposure to and understanding of Scala

### Source Control and IDE:

Git, SourceTree and Git Extensions, PyCharm

### Other Skills:

Datalku, Linux CentOS 6, SSH, Putty, Agile