# Michael Higgins

#### Contact

Email: MHigginsAnalytics@gmail.com Portfolio: mdhigg.github.io/Portfolio

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#### **Professional Summary**

A curious and creative data analyst who uncovers missed patterns and links within datasets that improve business and people outcomes on a national scale. Enthusiastic about finding simple ways to explain complex information through clear and compelling visualisations, experienced at making predictions and presenting recommendations to CEO's as well as internal and external stakeholders. Driven to go beyond when working with data, has previously created computer models to assess data and determine requirements.

## **Professional Experience**

# Head of Data, Reporting, and Curriculum (Assistant Headteacher)

# Abbs Cross Academy, Loxford School Trust September 2017 – August 2023

Identified clear targets for improvement and gaps in pupils' knowledge using internally generated pupil attainment data.

Produced fortnightly data reports for the Headteacher and Trust CEO, analysing against national progress metrics and recommending actions for staff, increasing student outcomes from the bottom to the third quintile nationally in two years.

Created a Python program to analyse the assessment data for pupils and generate bespoke work packs, resulting measured student progress improving at twice the previously recorded rate and reducing staff workload by over 30 hours per person.

Led the Department Review process, organising peer reviews between Heads of Department and chairing feedback sessions between Middle Leaders. Wrote and delivered report to the Senior Leadership Team, Headteacher, and CEO.

# Head of Mathematics Loxford School, Loxford School Trust January 2014 – August 2017

Devised a teaching and assessment scheme for the new national mathematics teaching framework, resulting in examination grades in the top 2% nationally for student progress.

Implemented a Strategic Operational Calendar for data collection and analysis, presenting the process to over 100 Middle and Senior Leadership staff across five schools within The Trust, resulting in improving work efficiency and reducing middle leaders' workload by 10 hours per person.

#### Technical Skills

Data Collection
Data Cleaning
Excel
Python
MatPlotLib
Pandas
SQL
Tableau

#### Professional Skills

Communication Creativity Leadership Management Presentation Training

## **Projects**

## Influenza Staffing

Data sourcing and cleaning to perform temporal and spatial analysis.

# Retail Inventory

Data cleaning and analysis using SQL queries to answer business questions.

Results presented using Tableau.

# eCommerce App

Data wrangling, consistency, and exploratory statistics using Python.

Presenting and interpreting data through MatPlotLib and Pandas.

# Deputy Head of Mathematics Wanstead School

September 2011 – December 2013

Ran a mentoring program for inexperienced staff members, improved the outcomes for inexperienced staff from 50% to over 90% passing at the "Outstanding" level.

# Teacher of Mathematics Roding Valley High School

*June* 2009 – *August* 2011

Planned, delivered, and assessed mathematics lessons.

#### Education

# Master of Electrical and Electronic Engineering (Honours, 2:2)

Imperial College London

October 2003 – June 2007

Master's project in design and application of artificial intelligence in Verilog Hardware Description Language

## **PGCSE**, Secondary Mathematics

London South Bank University

October 2008 – June 2009

#### Certifications

## **Data Analytics**

CareerFoundry

September 2023 – Present

# Leadership Development Program

National College for School Leadership

January 2011 – May 2011