# Dr. Michael Andrew Barrowman, PhD

# **Data Scientist**

### Contact

Newton-Le-Willows, Merseyside myko101ab@gmail.com +44 7467 456 803 MichaelBarrowman.co.uk LinkedIn

# Education

PhD, 2016 - 2022 University of Manchester

Mathematics MSci, 2009 - 2013 University of Lancaster

## Skills

### Coding

R, SQL, SAS, Python, C++, DAX, bash, VBA

#### Tools

RStudio, VSCode, PowerBI, Teradata, Jupyter, Excel, AWS,

Data Visualisation/Presentation RShiny, ggplot, matplotlib,

### Modelling

0

0

LaTeX, RMarkdown

model validation, linear regression, logistic regression, survival analysis, multi-state models, multinomial regression

# **Experience**

### Compliance Manager, The Very Group

Feb 2022 - Present

- o Analysed financial and customer data using Teradata SQL, SAS and DAX
- Performed second-line testing and auditing of company processes
- Validated models from methodological and governance perspective
- o Extracted compliance monitoring metrics and KPI from customer database
- o Designed and maintained a PowerBI dashboard to display key business metrics
- o Managed Alation data catalog as a subject matter expert within compliance team

### Data Scientist, Mirador Analytics

Jan 2021 - Dec 2021

- o Analysed health insurance and medical data using R and python
- o Utilised US census data via multiple APIs to analyse demographic data
- o Reported on HIPAA compliance within large data samples
- Maintained internal R package, including documentation and testing

### Maths, Stats & IT Tutor, LJMU

Dec 2019 - Dec 2020

- o Conducted lecture series' on learning R for non-statistics students
- o Taught additional courses in SPSS, Word, Excel and nVivo
- o Supported undergraduate and postgraduate students with projects and homework

### PhD Candidate, University of Manchester

Oct 2016 - Apr 2022

- Analysed medical data using R and C++
- o Researched effects and outcomes related to CKD within the current literature
- o Developed and validated models predicting outcomes using multi-state models
- o Improved current understanding of multi-state models extending survival analysis
- o Designed and implemented methodology for improving model validation
- o Created an RShiny app to predict patient outcomes

### **Research Assistant**, University of Manchester

Nov 2015 - Sep 2016

- Analysed medical data using R and SAS
- o Produced methodological improvements to pragmatic trial literature

### Data Analyst, AQA

May 2015 - Sep 2015

- Analysed educational exam data using Excel and VBA
- o Modelled result progression from examiner rate of marking
- o Implemented grade boundaries based on bayesian statistical inference
- o Coordinated with wide variety of teams to disseminate information

### **Assistant Statistician, University of Manchester**

Aug 2014 - Apr 2015

- o Analysed medical data using R, Stata and Excel
- o Produced standardised datasets for pharmaceutical client
- o Composed standard operating procedure documents for internal processes
- Designed probabilistic models for fuzzy data merging of EHR and eCRF data