

Theo Rutter

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Experience

Manchester Airports Group (MAG) – Assoc. Data Scientist

October 2019 - Present

- Tasked with overhauling the passenger forecasting algorithms used by the business. Developed a solution which forecasts passenger arrivals in 15 minute intervals, improving on the accuracy of the previous methodology by more than 15%.
- I was responsible for the project from end to end, collating data from our cloud data warehouse, performing EDA in jupyter, developing a performant predictive model and placing the model into production on AWS.
- Completed extensive training in Python (numpy, pandas), SQL, cloud infrastructure, and DevOps (gitlab, docker).

Siemens Managed Services – Data Analyst Intern

July 2018 – May 2019

- Using in-house systems I identified errors which were preventing Siemens from invoicing customers successfully. I recovered over £20,000 of revenue within 8 weeks of joining.
- I mentored employees within the business to detect and rectify invoicing errors.

Education

University of Nottingham – Integrated Masters in Mathematics and Statistics (First Class)

September 2015 - July 2019

- Relevant Courses: Statistical Machine Learning, Programming, Time Series and Forecasting, Mathematical Finance, Probability, Linear Algebra, and Calculus.

Personal Projects

- To automate my job search I wrote a python wrapper for the API of a popular job site which I integrated into a command line interface for my own use.
- Using data from the API I wrote a blog post presenting an application of cluster analysis to job description text data; by applying principle component analysis to TF-IDF features from each job description they could be plotted and were shown to cleanly separate into three meaningful clusters.

Skills

- Python (Pandas, NumPy, Scikit-learn, Flask, boto3) and SQL
- Supervised learning: linear and logistic regression, decision trees, random forests