

# Christopher Tyson

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Aspiring Data Scientist

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## Skills

### OS

Linux, Windows

### LANGUAGES

Python, Java, MATLAB, R, kdb+

### DATA SCIENCE

pandas, matplotlib, sklearn, ggplot2

### CLOUD

AWS, GCP, Kubernetes

### OTHER SKILLS

Version Control (Git, Jenkins)

LaTeX

Agile Scrum, Kanban

Databases (kdb+, SQL)

Natural Language Processing (nltk, spacy)

Network Analysis (networkx, igraph)

## Coursework

Research Methodology

Machine Learning

Computer Vision

Social Networks

Text Analysis

Data Visualisation

Probability and Statistics

## Awards / Achievements

2020

DEAN'S COMMENDATION

Awarded for Exceptional

Performance on MSc. Data Science

2020

MSC. AWARD

Awarded for Highest Departmental

Performance on MSc. Data Science

2020

MACHINE LEARNING

Achieved a mark of 99% in my MSc.

Machine Learning module, with two

courseworks given a mark of 100%.

## Education

2019-2020 **University of Exeter**

**MSc. Data Science**

Distinction (84%)

*Machine Learning, Statistics, Networks, Text Analysis, Research Skills*

2016-2019 **University of Exeter**

**BSc. Computer Science & Mathematics**

First Class Hons.

*Programming, Data Structures, Algorithms, Probability, Differential Equations*

2013-2015 **Durham Sixth Form Centre**

**A Levels**

A\*A\*A\*AA

*Mathematics, Physics, EPQ, Computer Science, Further Mathematics*

## Experience

2018-NOW **JPMorgan Chase & Co.**

**Software Engineer**

Currently in a graduate role with responsibilities including: visualising and summarising large data sets, managing and developing interactive dashboards to assist clients in eTrading, and maintaining and updating a large code repository.

*kdb+, Java, Groovy, Grafana, Jenkins, Git*

2020-2021 **Just Like Us**

**Software Engineer**

Worked in a team of engineers to build a dynamic form for LGBTQ+ Charity Just Like Us' "Tell a School Campaign", helping users refer new schools allowing the charity to grow their network.

*Wordpress, Salesforce, APIs, Javascript, SQL*

2017-2018 **University of Exeter**

**Student Staff Liaison Committee Chair**

Elected Chair of the SSLC in 2017. Role included noting concerns/issues from the student body, chairing departmental and college level meetings regarding Computer Science, and providing a voice for students.

*Organisation, Communication Skills, Leadership*

2017

**Common Purpose**

**Global Leader Experience Philadelphia**

Secured a place on the Common Purpose Global Leadership program through an essay writing competition. Tasked with solving a major world challenge: "How Do Smart Cities Ensure They Are Inclusive?" and met with a number of city leaders from Design Philadelphia, Habitat for Humanity and the Mayor's office.

*Collaboration, Communication Skills, Presentation Skills, Leadership*

## Projects

2021

**Ingredient Finder Website**

Currently learning web frameworks in order to build a site that will allow users to support small, local businesses when buying speciality ingredients rather than purchasing from large, online suppliers.

*React, Flask, MongoDB*

2020

**MSc. Thesis**

"A Bird's Eye View: To What Extent Can We Socially Sense Local Attitudes to Political Parties Using Twitter?". This project looked to assess the viability of electoral prediction methods using socially generated data, with a focus on Twitter. A case study of the 2019 UK General Election was used and a prototypical method was developed to locate Twitter users to UK constituencies, determine their voting intentions and tally these votes. Awarded 77% and was recommended for publication.

*Python, Web Scraping, APIs, ML, NLP, Sentiment Analysis, Network Analysis*

2019-2020 **MSc. Various**

Worked on a number of smaller projects throughout my master's, and where given the freedom I geared these towards Computational Social Science. Some highlights included: using NLP and Sentiment Analysis to highlight and visualise bias in tabloid articles about Meghan Markle and Kate Middleton, an essay detailing the unorthodox marriage of Data Science and Classical Studies, and constructing a news sharing network from an open dataset of Coronavirus related tweets to study news sharing communities and the spread of misinformation in the wake of the pandemic.

*Python, R, Web Scraping, Data Visualisation, NLP, Sentiment Analysis, Network Analysis*

2019

**BSc. Dissertation**

"3D Facial Scanning and 3D Printing Based on a Single Commodity Camera". Involved the production of a system which could scan a user's face using commodity technology (a webcam or phone camera) and produce a 3D model utilising various Computer Vision techniques. Novel post-processing steps then prepared the model, and outputted in a format which was able to be 3D printed. Awarded 75%.

*Python, MATLAB, Computer Vision, Statistics, 3D Printing*