

# BRADLEY C. CARRUTHERS

Pimlico, London

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## PERSONAL DETAILS

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Nationality: South African

Languages: English (First language proficiency), Afrikaans (Fluency)

## TECHNICAL SKILLS

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- Competent: Python Scipy stack (Pandas, Numpy, Scikit-learn, NLTK), Git, R, SQL, Unix Shell Scripting, Data Science, Data Analysis, Machine Learning, Web Scraping, Cloud Computing on Google Cloud Platform and Amazon Web Services
- Conversant: Docker, Stata, SAS, INET Bridge Infront, HTML, CSS

## EDUCATION

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September '18 - September '19  
*Masters in Statistics (Research)*

London School of Economics and Political Science

- Full Funding from Commonwealth Scholarship Committee
- Supervisor: Milan Vojnovic
- Thesis: Predicting Community Engagement with Questions Across Online Question-Answer Fora
- Subjects: Distributed Computing for Big Data, Quantitative Text Analysis, Algorithms and Computation, Fundamentals of Social Science Research Design, Statistical Inference

January '17 - December '17  
*Honours Bachelor of Commerce (Economics) Cum Laude*

Stellenbosch University

- Supervisor: Dr Debra Shepherd
- Thesis: Teachers' perceptions of self-efficacy, job satisfaction and learner performance: An investigation into the 2004 Grade 6 Intermediate Phase Systemic Evaluation
- Subjects: Masters Econometrics, Microeconomics, Macroeconomics, The Economics of Technological Change, Development Economics, Public Economics, Labour Economics, The Economics of Education

June '17 - July '17  
*Applied AI Short Course*

iXperience

- Topics covered: Tensorflow, Natural Language Processing, Multi-Layer Perceptrons, Recurrent Neural Networks, Convolutional Neural Networks, XGBoost, Keras
- Final Project: An Analysis of South African Education Data using Machine Learning Techniques

December '15  
*Passed Level 1 of the Chartered Financial Analyst Exam*

CFA Institute

- Subjects achieved over 70%: Alternative Investments, Economics, Equity Investments, Ethical & Professional Standards, Fixed Income Investments, Portfolio Management, Quantitative Methods
- Subjects achieved between 50 and 70%: Corporate Finance, Derivatives, Financial Reporting & Analysis

January '14 - December '14  
*Honours Bachelor of Commerce (Statistics) Cum Laude*

Stellenbosch University

- Supervisor: Dr PJU van Deventer
- Thesis: A Broad Summary of Statistical Process Control

- Subjects: Multivariate Methods, Applied Time-Series, Datamining, Biostatistics, Stochastic Modelling, Applied Stochastic Simulation, Introduction to R Programming

## EXPERIENCE

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iXperience

May 2019 - July 2019

*Data Science Teaching Assistant*

- Course and culture preparation (content creation, information sessions etc.)
- Assisted with creation of lectures, exercises, quizzes, and projects
- Lectured on data science topics and held workshops

iXperience

May 2018 - July 2018

*Data Science Teaching Assistant*

- Course and culture preparation (content creation, information sessions etc.)
- Assisted with creation of lectures, exercises, quizzes, and projects
- Lectured on data science topics and held workshops

iXperience

February 2018 - August 2018

*Academic Manager*

- Helped design and implement research-backed educational practices for courses
- Helped manage and onboard Head Teachers to build and teach courses
- Helped manage and onboard Teaching Assistants to support Head Teachers
- Helped manage the success of classroom learning during the iXperience program

Stellenbosch University Department of Economics

January 2018 - June 2018

*Lecturer*

- Lectured over 300 first-year students on Microeconomics (Economics 114)
- General course administration and coordination, weekly meetings with lecturing team

SecureWealth (Pty) Ltd

November 2014 - January 2018

*Investment Analyst and Financial Adviser*

- Fundamental analysis, investment suitability, strategic asset allocation
- Economic and market forecasting, research on both local and overseas markets and financial products

Stellenbosch University Mathematics Division

September 2013 - March 2016

*Teaching Assistant*

- Assisted in redesigning the First Year Mathematics course structure
- Facilitated effective communication between academic staff, assistants and students
- Supervised a team of 20 Mathematics Assistants for weekly Tutorials
- Assisted students during Tutorials

## SOFT SKILLS

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- Leadership, management, public speaking, networking, communication, training, mentoring