

BRADLEY C. CARRUTHERS

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EDUCATION

Masters in Statistics (Research) with Merit

September '18 - September '19

London School of Economics and Political Science

Awards: Commonwealth Scholarship for academic excellence

Thesis: Predicting Community Engagement with Questions in the StackOverflow Online Q&A Community

Subjects: Distributed Computing for Big Data, Quantitative Text Analysis, Algorithms and Computation, Fundamentals of Social Science Research Design, Statistical Inference

Honours Bachelor of Commerce (Economics) with Distinction

January '17 - December '17

Stellenbosch University, South Africa

Thesis: Teachers' perceptions of self-efficacy, job satisfaction and learner performance

Subjects: Masters Econometrics, Microeconomics, Macroeconomics, The Economics of Technological Change, Development Economics, Public Economics, Labour Economics, The Economics of Education

Honours Bachelor of Commerce (Statistics) with Distinction

January '14 - December '14

Stellenbosch University, South Africa

Thesis: A Broad Summary of Statistical Process Control

Subjects: Multivariate Methods, Applied Time-Series, Datamining, Biostatistics, Stochastic Modelling, Applied Stochastic Simulation

Bachelor of Commerce (Mathematical Sciences)

January '11 - December '13

Stellenbosch University, South Africa

Average grade: 75%

Awards: Golden Key International Honour Society membership for academic excellence

Passed Level 1 of the Chartered Financial Analyst Exam

December '15

Chartered Financial Analyst Institute

WORK EXPERIENCE

Data Science Teaching Assistant (Lisbon)

May 2019 - July 2019

iXperience Pty Ltd - Technology focused education provider

- Enhanced the data science curriculum, ensuring course quality and course profitability for iXperience
- Demonstrated the full toolkit of data science to classes of 30 talented students - from data processing, cleaning and exploratory analysis to natural language processing, dimensionality reduction, clustering and machine learning
- Personally taught classes on cloud computing and distributed data using Google Cloud Platform and PySpark
- Supervised over 8 data science initiatives in student internships - including telecommunications, hospital & healthcare, digital marketing, retail analytics and tourism
- Received outstanding feedback on the value I added to both students and company

Data Science Teaching Assistant (Cape Town)

May 2018 - July 2018

iXperience Pty Ltd

- Built and taught a diverse, state-of-the-art data science curriculum as part of a dynamic teaching team
- Presented the full spectrum of data science to classes of 30 students - from data wrangling, web scraping, visualisation and software version control to machine learning, deep learning and cloud computing using AWS
- Supervised over 10 data science initiatives in student internships - including machine learning consulting, travel booking, a digital micro-job platform and a meal ordering and delivery app
- Received outstanding feedback on my influence on students and effectiveness within the company

Academic Manager (Cape Town)

February 2018 - August 2018

iXperience Pty Ltd

- Implemented research-backed educational practices to help design and develop 5 cutting-edge courses (including Data Science, Full Stack Coding, Investment Finance, Management Consulting and FinTech/Blockchain)

- Sourced, integrated and managed over 20 highly-skilled Head Teachers and Teaching Assistants to teach courses
- Analysed and actioned key performance indicator data (NPS) from courses to promote course profitability

Analyst

November 2014 - January 2018

Secure Wealth Pty Ltd - Asset and wealth manager, USD 53 million AUM

- Built R functions to process, clean and analyse financial data to save employees 2 hours of Excel work a week
- Facilitated the digitalisation of client data and movement to the Cloud to improve employee productivity
- Improved the company data management plan to enhance the confidentiality of client records
- Trained and mentored office staff regarding data protection, administration and management
- Managed and oversaw local and offshore investment portfolios for over 350 individuals, companies and trusts
- Conducted rigorous market and economic research to provide above-inflation portfolio performance for clients
- Consulted with and advised clients regularly on how to manage their wealth and generate capital growth
- Effectively communicated complex financial concepts to clients and established constructive relationships

Microeconomics Lecturer

January 2018 - June 2018

Stellenbosch University, South Africa

- Lectured on microeconomics concepts to over 350 undergraduate students from across South Africa
- Inspired students and substantially increased their interest in economics as a subject

Pure Mathematics Teaching Assistant

September 2013 - September 2016

Stellenbosch University, South Africa

- Redesigned and enhanced the first year pure mathematics course structure for over 1000 students
- Facilitated correspondence and coordination between academic staff, student tutors and students
- Managed and led a team of 20 tutors for weekly tutorials

TECHNICAL SKILLS

Competent:

- Python; SciPy Stack
- SQL
- Data Processing and Analysis; Machine Learning
- Expert and lay communication
- Training and mentoring
- Econometrics; Natural Language Processing
- Spark; Git; R

Conversant:

- Linux, Bash, Web Scraping
- Google Cloud Platform (GCP)
- Amazon Web Services (AWS)
- MS Excel
- Hadoop; Hive; Java;
- Docker; Tensorflow
- Statistical Computing

PERSONAL DETAILS

Nationality: South African

Languages: English, Afrikaans