# Aditya Ravuri

## **Education**

## MPhil in Management, Cambridge University

Oct '16 - Jun '17

Commendation (70% - top ~25%) | Audits: Philosophy of Science, Measure Theory | Focus: Strategic Valuation (top prize), Economics

#### **BSc Hons in Actuarial Science, Heriot-Watt University**

Sep '13 - lun '16

Distinction (83%) (top 3%), exempted from IFoA CTI-CT8. Focus: Statistics, Quantitative Risk Management, Mathematical Finance Received top prize in every research & statistical project. One project was selected to be published in the university magazine. Graduated at age 18.

Awarded Highest Honors for performance on the HBX: CORe & Harvard Summer School in analytics, economics & physics. Bronze Volunteering Award (for student mentoring and acting as an Executive & President for the Union & its Chess Society)

Projects areas included GARCH models, copulas, EVT, liquidity risk case-studies, economic scenario generators and advanced statistical inference.

## **IGCSE & GCE A-Levels, Cambridge**

Feb 'I I - Jun 'I 3

A\*A\*A\*A in A-Levels (670 UCAS Points) across the Sciences, Mathematics, Applied ICT & English A\*A\*A\*A\*ABB in IGCSE across the Sciences, English, Mathematics, French & ICT (done in 3 months) Awards: top student, 3rd in 2012 U16 Zambian Chess Nationals, bronze DofE and a regional medal for research on accessible clean fuels.

## **Work Experience**

## Quant Analyst (Assistant VP), Barclays Plc

**Tentative** 

Received an offer in the COO & Functions business area, in the Risk / Quantitative Analytics / Asset & Liability Management team.

### Data Scientist & Statistician, Sciemus Ltd.

Involved with building and maintaining end-to-end tech-related solutions, particularly in the space, weather and power business areas. This involves data cleaning, analysis, modelling, documentation, web-app deployment, basic server and database maintenance, research (e.g. to accelerate computations using an AWS based distributed back-end, or by using MCMC search methods) and library maintenance (for plotting & quick sampling).

On the modelling side, I've worked with GLMs, Hidden Markov models, Gaussian Processes (including sparse approximations), Random Fields, Convolutional NNets, VAEs, time-series estimation, non-parametrics, importance sampling, fuzzy logic, basic prior elicitation and associated Jacobian adjustments for particular small-dataset problems and subset simulation. Currently involved with research around GPs, SDEs and differential equations.

## Data Science Intern, Coloplast Ltd.

Jul '17 - Aug '17

Aided the implementation of a business time series forecasting model by building loss functions, splines and linear filters, linking various model components, fitting seasonality, covariate forecasting and fitting ARMA models to the resultant error series using R & Excel.

### Management Consultant, Jaguar Land Rover Auto Pic

May '17 - Jun '17

Delivered & presented the paper below as part of a team-based consulting project - 2nd in class. My presentation was highly commended.

# Reports

Ravuri A. \*; Ball A.; Schilling K. S.; Philips H.; Guillet M. (2017) "Modelling the Contribution of Jaguar Land Rover to the UK Economy" for JLR. \* conducted original research on improving the accuracy of multipliers in input-output theory by utilizing internal supply chain data.

## **Technical Skills & Awards**

Other Information

OSs: Linux, OSX, Windows

Frameworks: Keras, Tensorflow, Ms Office, Git, Scipy, Plotly Dash, (@Risk, Flask, PyMC3) Languages: R, Python, Stan, JAGS, (C, SQL, Octave, RShiny, theme development, basic NLP) Other: Machine Learning, Deep Learning, Amazon AWS, Jupyter, Markdown, MathJax, LaTeX

Scholarships: University of Melbourne (\$45,000), Cass Business School (£2,000), both declined

Languages: English, Hindi, Telugu, basic French Interests: I'm deeply interested in computational statistics & machine learning. Astronomy; I have a year of experience with the Northumberland telescope and I've published in a supernova catalogue and the CU astrophotography magazine.