Ahmad Abu-Khazneh

London-based. Dual citizenship: Jordan, UK

I freelance under my registered trade name: Algo T-Rex Ltd.

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Current

Senior Fellow in Data Science
Faculty of Natural Science
Imperial College London
June 2018 – Current

I am responsible for lecturing the course "Applied Probability" for third and fourth year students. I am also providing project supervision for students specialising in statistics and machine learning.

I have an additional duty of developing parts of Imperial's new "MSc in Data Science", which will be launching in 2019.

For the latter I am working with Dr Seth Flaxman and Professor Niall Adams.

Work Experience

Technical Architect (Contract)
UK Ministry of Justice
Sept 2016 – Feb 2017

I mainly worked on the Ministry of Justice's new Advanced Analytics Platform, where I was involved on the technical side of its roadmap.

Graduate Teaching Assistant
London School of Economics
Aug 2010 – June 2015

Modules taught (at different points at the LSE): Algorithms & Computation, Game Theory, Operations Research, and Mathematical Modelling & Simulation. Responsibilities include: conducting classes, office hours, exam marking and sometimes lecture notes.

I also taught courses in the industry on software development and cloud computing (mainly AWS).

I have won four awards for my teaching, *"Awarded in recognition of significant contribution to teaching at the LSE. The winners are nominated as a result of exceptional feedback from students, lecturers and department members"*.

 – Teaching Award 2015, Department of Management Science, LSE.
   Announcement: `http://www.twitter.com/LSEMaths/status/595955459774873600`

 – Teaching Award 2011, 2012 and 2014. Department of Mathematics, LSE. *Announcement:*
   `http://www.lse.ac.uk/newsletters/pressAndInformation/specials/2014/teachingSpecial.htm`

Data Scientist
Royal Mail Group
Jun 2014 – Dec 2015

I worked on implementing data science tools that integrated with the Royal Mail's data warehouses, which fed into various logistical and operational functions around the company.

Product Manager
Financial Times Group
Oct 2010 – Oct 2013

I implemented tools around semantic contextual analysis and natural language processing of news items.

ACADEMIC BACKGROUND

PhD, Mathematics
London School of Economics
Sept 2009 – Aug 2016 (Part-Time)

My thesis was in a field of mathematics called combinatorics, specifically in an area called graph theory. Graph theory is the mathematical study of networks.

In my research I implemented algorithms that allowed me to analyse how some important graph parameters behave in non-standard graphs (called hypergraphs).

In particular the parameters are relevant for an important problem in the field (which has been open for 50 years), and for which I was able to shed some light by tackling it from a computational perspective.

More information can be found in my thesis, or related papers on my homepage.

MSc, Advanced Computer Science, University of Manchester. *(2005 – 2007)*
MSc thesis: I implemented a program that carried out logical reasoning of simple statements.

BEng, Computer System Engineering, 2:1, University of Manchester. *(2002 – 2005)*
Project: I implemented a program which was efficiently able to tell if a number is prime or not.

MISC

Student Support: I was an adviser at the *Well-being Team* (2014 – 2015), part of the LSE's Student Counselling Service. I helped students deal with serious anxiety or stress due to academic performance.

Refereeing: I peer-reviewed research papers for the mathematics journals *European Journal of Combinatorics*, *Graphs and Combinatorics* and *Electronic Journal of Combinatorics*.

REFERENCES

Prof. Bernhard von Stengel, London School of Economics. *(PhD adviser)*
Contact details: `http://www.maths.lse.ac.uk/personal/stengel/`

Thomas Lee-Warren, Director, Technology & Commercial Insight, Royal Mail Group.
Contact details: `https://uk.linkedin.com/in/thomas-lee-warren-884a533`