Dr. Amr Ellabban

Experience

Boston Consulting Group

Data Scientist Nov 2016–present

Based in the Gamma advanced analytics team. Client-facing role, using statistical modelling and machine learning techniques to inform clients' strategic decisions. Projects have included:

- Prototyped a churn model for a leading UK pension provider, identifying >£10bn in assets at risk and key customer targets for retention campaigns.
- Coached clients team to integrate developed churn model into live systems, and to update and develop on an ongoing basis.
- \bullet Developed predictive model to compute risk of component failures in industrial equipment with >80% accuracy.
- Performed statistical analysis on the impact of external maintenance on subsequent equipment failures for a leading packaging manufacturer.

OC&C Strategy Consultants

Data Analyst

Oct 2015-Nov 2016

Client-facing role, using statistical modelling and analytics techniques within retail and services sectors.

Projects have included:

- Simulated new staffing and job scheduling models for a large mobile workforce. These simulations were used to determine optimal staffing while maintaining service levels, identifying £2m in potential cost savings.
- Prototyped a reporting system consolidating 40 data sources for a leading vehicle repair company. New reports are used to align field management behind a key set of metrics driving business performance.
- Led an analysis of customer behaviour and staffing for a leading premium retailer. Analysis of transaction level data, aligned to staffing levels and CRM data allowed client to better align staffing to customer needs.
- Performed statistical analysis of transactional data to assess the impact of pricing strategy of a large leisure client across multiple brands and product segments, identifying 4% margin uplift.
- Analysed potential locations for UK store-roll out strategies for a leading coffee shop brand, identifying scope for 30% growth.

VisualDNA

Lead Data Scientist Research Engineer Jan 2015–Sept 2015 Feb 2014–Dec 2014

Used big data analysis, for applications in online marketing. Promoted to team lead role within 11 months. Responsibilities included:

- Managed a team of 5 analysts, developers and data scientists performing large scale data analysis on >4.5TB of data.
- Responsible for developing performance measures for core algorithms, reporting key business metrics to senior management, and providing technical insight for clients.
- Designed and implemented various machine learning algorithms, leading to 20% improvement in data quality over existing systems.

Digital Bottles

Co-founder and Developer

2012-2013

A non-profit social website, *digitalbottles.com*, effectively digitising the process of sending a message in a bottle

- Designed and implemented algorithms for message distribution
- Attracted over 400 registered users in first two months of operation

Oxford Capital Partners

Intern Summer 2007

Venture capital firm based in Oxford specialising in science and technology investments

- Conducted intellectual property due diligence
- Produced marketing material, reporting directly to CEO

Education

University of Oxford, *Magdalen College*

DPhil Engineering Science

Sept 2009–Dec 2013

(Computer Vision and Machine Learning)

- Developed methods to automate large-scale quantitative analysis of biological data
- Published four papers as first author
- Worked on four cross-disciplinary projects with international collaborators
- Supervised and assessed undergraduate programming labs

University of Oxford, Magdalen College

MEng Engineering Science, First Class Honours

Sept 2005–Jun 2009

Elected Exhibitioner of Magdalen College (academic award) for three academic years

Programming skills

Advanced: Matlab, R

Proficient: Scala, Python, Scalding (Hadoop), Hive, SQL

Basic: C, C++, Java Languages

Native: English, Arabic Conversational: French