Jonny Evans

Contact

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Theory

- Random forests
- Deep learning
- Clustering
- Bayesian networks
- Regression
- Statistics
- Optimisation
- Graph theory

Programming

- Python (3 years)
- C# (3 years)
- MATLAB (1 year)
- SQL (2 years)
- Docker (1 year)
- Visual Basic for Applications (VBA) (1 year)
- Plastic SCM (version control) (1 year)
- LaTeX (4 years)

Education

Data Science PhD student, Transportation Research Group, University of Southampton, U.K. (July 2016 – Present).
Project funded by EPSRC and Siemens plc. Developed machine learning algorithms that use novel contextual features (sporting events, public holidays, weather, school dates etc.) to improve on the state of the art in road traffic forecasting and incident detection algorithms. Currently collaborating with Siemens' Senior Product Managers, Software Architects and Developers to implement such algorithms in clients' projects.

BSc Mathematics, University of Birmingham, U.K. (2012-2015).
First class honours. Blackburn Prize for highest mark in graduating year group in final year research project, entitled 'Google's PageRank algorithm'.

Work Experience

Graduate Consultant in Intelligent Transportation Systems, WS Atkins plc. (September 2015 - June 2016).
- Head of stakeholder engagement for a feasibility study regarding the deployment of 'temporary' electric vehicle (EV) rechargers across the U.K. for Highways England. Tasks included:
    - Conducting interviews.
    - Organising, presenting and debating at meetings with key stakeholders.
    - Researching case studies (online, by phone and by site visit).
    - Conducting financial analysis into the consumer cost of EV chargers.
    - Developing maps of areas of the U.K. that were within certain distances from static EV chargers.
    - Author of the final report to Highways England, which was subsequently published (see publications section).
- Conducted analysis to find the optimal locations to implement ramp meters in North Carolina, U.S.A., based on safety, traffic and geometry data. Authored the final report to the North Carolina Department of Transportation, which recommended the 30 most suitable ramp meter locations for implementation (of 249 candidate locations).
- Collaborated with the Atkins Data Science team in a project to build a VBA based Excel model of household recycling

Data science libraries

- Scikit-learn (3 years)
- Keras (1 year)
- TensorFlow (1 year)
- NumPy (3 years)
- Pandas (3 years)
- Matplotlib (3 years)
- Seaborn (1 year)

Communication

- Presentations
- Academic and technical writing
- Interviews
- Surveys
- Cross-discipline collaboration
- Negotiation
- Stakeholder engagement

across Hampshire, U.K., for Hampshire County Council policy advisors.
- Managed a small team of graduates and apprentices to monitor CCTV cameras for a project that assessed the use of Smart Motorways in the U.K.
- Project management and quality assurance tasks to aid the development of various 'Standards for Highways' documents for Highways England.
- Helped to develop bids for work, including orchestrating colleagues from many different disciplines of the company.

Summer Intern, Cirrus Logistics Ltd. (June/July 2014).
Tested and developed software that optimised the scheduling of shipping berths.

Summer Intern, Mentor Graphics Corp. (August 2011).
Tested software and built CAD models in SolidWorks.

Publications

- 'RoadCast: An algorithm to forecast this year's road traffic'. Jonny Evans, Ben Waterson, Andrew Hamilton. In proceedings of the 97th Annual Meeting of the Transportation Research Board, 7-11th January 2018.
- 'Temporary electric vehicle recharging'. Matthew Clarke, Andrew Muir, Jonny Evans, Dean Kerwick-Chrisp. In proceedings of the 11th ITS European Congress, Glasgow, Scotland, 6-9 June 2016.

Personal

- Created an Excel add-in using Visual Basic for Applications (VBA), which auto-formatted engineering symbols. Did this project to help colleagues at Atkins and improve my coding skills.
- Various data science pet projects on Kaggle and Github (check my website for details).
- Played table tennis since the age of nine, with a highest ranking of 2nd in England in under 13s. Also coached players of various ages and abilities.
- Social Secretary of the University of Birmingham table tennis club. Negotiated the purchase of new tables for the club.
- I enjoy running and playing tennis in local clubs.
- Keen follower of the Effective Altruism movement.