

Alexander Miserlis Hoyle

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EDUCATION

MSc in Computational Statistics and Machine Learning

September 2018

University College London, *London, UK*
4.0 equivalent GPA

- Graphical Models
- Supervised Learning
- Applied Bayesian Methods
- Statistical Natural Language Processing
- Statistical Models and Data Analysis
- Advanced Deep Learning and Reinforcement Learning
- Applied Machine Learning
- Selected Topics in Statistics

BA in Mathematics

May 2013

Wesleyan University, *Middletown, CT, USA*
3.6 GPA

PUBLICATIONS

Hoyle, A., Wolf-Sonkin L., Wallach, H., Cotterell, R., and Augenstein, A.

Combining Disparate Sentiment Lexica with a Multi-View Variational Autoencoder. NAACL. 2019.

Hoyle, A.

Citation Detected: Automated Claim Detection through Natural Language Processing. Master's thesis. 2018.

EXPERIENCE

Master's Student and Intern, UCL Machine Reading Group

June 2018 - December 2018

- For thesis, developed model to determine when factual claims require an external citation for support using Wikipedia data. Constructed dataset and suite of neural architectures in TensorFlow, significantly outperforming baselines. Received a distinction.
- Following thesis, worked with outside researchers to develop generative latent variable model for quantifying gender bias in large text corpora. Devised novel Variational Autoencoder to combine disparate sentiment lexica into common score.

Senior Research Analyst, The Brattle Group

November 2014 - September 2017

- Initiated and later led development of large-scale document review tool in Python; created search backend, user interface, classification methods.
- Delivered weekly presentations to client to assess conditions of government housing and detect fraud using database of 30 million work orders; used data to build interactive websites for client use.
- Replicated and extended econometric methods from academic papers for client analyses.

Consulting Associate, Frank N. Magid Associates

July 2013 - October 2014

- Led analysis and construction of qualitative and quantitative reports for clients in media and marketing; worked directly with clients to meet objectives related to branding, product development, and strategy.

Quantitative Analysis Center Research Apprenticeship, Wesleyan University

Summer 2011

- Collaborated on research in child language development with director of cognitive psychology lab.
- Assessed the validity of several competing theories regarding numerical development in children by creating empirically-derived models of counting-system acquisition.
- Delivered a poster presentation and composed a paper on research to incorporate in future lab work.

SELECTED SKILLS

- Fluent in French
- *Machine Learning and Data Analysis:* TensorFlow, Pyro, Torch, R, Pandas, Scikit-Learn, Shiny, SQL, Apache Spark, Excel, SPSS, Stata
- *Development tools:* Python, JavaScript, Django, Apache Solr, Amazon Web Services, Google Cloud Platform