Andrew Moore
Flat 15, Riverside Lofts
St George's Quay, Lancaster,
LA1 1RD
07982139490
a.moore@lancaster.ac.uk
https://apmoore1.github.io/

Profile

Currently a final year PhD student at Lancaster University within the School of Computing and Communications (SCC) and part of UCREL[1] and the Data Science Institute. I am studying how generalisable target dependent sentiment analysis methods are and how they can be improved through other sources of information. I am supervised by Dr Paul Rayson (SCC) and Prof. Steven Young (Accounting and Finance). I have worked and regularly collaborate with many academics during my PhD, research assistant and independent contract work. I have consistently performed well and delivered projects on time. I have always strived to beat my targets and widen my knowledge using external sources such as MOOC's and my colleagues' experiences.

Experience

Summer Intern **Alan Turing Institute** **July to Sept 2017**

I was part of a team led by Mirco Musolesi and Maria Liakata where my job was predicting users well-being from their text messages and social media posts. This involved understanding the main problems data variety and sparsity originally stated by my supervisor and confirmed through data exploration. Due to these problems it allowed me to research new areas of Natural Language Processing (NLP) such as natural language generation and domain adaptation. I applied this new knowledge by creating custom tensorflow models with the intention to solve the sparsity and variety problems. Through weekly team meetings I was able to communicate my findings and discuss different avenues of research for myself as well give suggestions to others. Overall the experience allowed me to broaden my NLP knowledge and expand my academic network through attending the regular NLP reading group at the institute.

Contractor **UCREL** **Dec 2016 to Feb 2017**

The role involved quick development of web scraping software to suit the needs of a research goal based on cyber security literature. The job taught me how to be self disciplined and autonomous as well as learning how to communicate my week to week findings with my employers. Finally due to my research background, I was able to become knowledgeable with the relevant cyber security literature and provide input to steer the project towards our research goal based on the literature.

Speaker & Teaching Assistant **UCREL summer school** **2016 and 2017**

I created a sentiment analysis session[2] as well as collaborating with colleagues on two other sessions: web scraping[3] and web cleaning[4]. Developing these sessions has given me experience in creating a lecture and practical with learning objectives that are achievable in the given time frame, as well as producing a clear and fluid presentation.

Part-time Research Assistant **UCREL** **Summer 2015**

I have worked on multiple projects:

1. A crowd sourcing web interface[5] created using ruby sinatra.
2. Annotating financial report data with respect to tone.
3. Web scraping software based on mechanize and selenium.

This work has allowed me to investigate new areas of research and collaborate with colleagues in the finance department, developing my teamwork and organisational skills.

---

[1] http://ucrel.lancs.ac.uk/
[2] https://github.com/apmoore1/SentiLexTutorial
[3] https://github.com/UCREL/web-corpus-construction
[4] https://github.com/UCREL/web-cleaning
[5] https://ucrel-vardsourcing.lancs.ac.uk/login

All of these experiences have allowed me to broaden my research, software and communication knowledge. They have also increased my understanding of how to better time frame a problem and give my supervisor a more accurate time scale or define when something will not be achievable. Additionally with working part time on projects, as well as a PhD full time, I have improved my time management. Finally being able to collaborate with other academics and industry has allowed me to broaden my knowledge and collaborative working skills.

Education

- Currently final year PhD student Lancaster University, EPSRC funded.
  PhD title – *Generalisability and Data Augmentation within Target Dependent Sentiment Analysis.*
- Lancaster University, BSc (Hons): Computer Science - 1st Class (Hons) graduated 2015.

Achievements

1. Taught on the 2019 applied data mining master's module at Lancaster University.
2. Contributed to the AllenNLP project[6].
3. Created the NLP group meetings and reading group, and have co-organised the data science group and UCREL seminars at Lancaster University.
4. One of the "Best of" SemEval 2017[7] papers with our system that came 4th in task 5 track 2 challenge, predicting the sentiment of financial headlines about a given company. The system used a Bi-Directional Long Short Term Memory (LSTM) Recurrent Neural Network (RNN) implemented using Keras library[8].
5. Part of a joint winning team (Lancaster A) for the best audience facing tool at the BBC news hackathon[9] where I helped create the web front end to the tool, actively supported debugging and pitching in with brainstorming ideas.

Talks

1. Presented a main conference paper and two different workshop papers since the start of my PhD.

Technical

- Knowledge and understanding of: Python, Ruby, Octave, HTML, Java, SQL.
- Version control using Git and Travis for deployment.
- I use Ubuntu everyday and comfortable with using the Unix shell.
- Libraries: allennlp, pytorch, scikit learn, tensorflow, sinatra.
- API's used: Twitter, Bing search, Guardian and Quandl.
- Github: https://github.com/apmoore1

Publications

- ORCID – 0000-0002-3395-0841
- Google Scholar - https://scholar.google.co.uk/citations?user=mJRN_SIAAAAJ&hl=en
- Moore, A & Rayson, P 2018, Bringing replication and reproduction together with generalisability in NLP:Three reproduction studies for Target Dependent Sentiment Analysis, COLING.
- Moore, A & Rayson, P 2017, Lancaster A at SemEval-2017 Task 5: Evaluation metrics matter: predicting sentiment from financial news headlines. in Proceedings of the 11th International Workshop on Semantic Evaluations (SemEval-2017). Association for Computational Linguistics, pp. 581—585.
- Moore, A, Rayson, P & Young, SE 2016, Domain adaptation using stock market prices to refine sentiment dictionaries. In Proceedings of the 10th edition of Language Resources and Evaluation Conference (LREC2016). European Language Resources Association (ELRA).

[6]https://github.com/allenai/allennlp
[7]http://alt.qcri.org/semeval2017/
[8]https://github.com/apmoore1/semeval
[9]http://bbcnewslabs.co.uk/2016/03/17/newsHACK-language-hack/