Teaching Statement

Alan Ritter

I enjoy teaching and mentoring students, and this is one of the main reasons why I have chosen to pursue a career in academia. I feel that good teaching is about creating a welcoming environment for students that pushes them to accomplish things they didn't know were possible, and provides them with the self-confidence to set their own appropriately ambitious goals in addition to a foundation of skills to help achieve them.

Good teaching is important because it can help to attract students from diverse backgrounds to computer science. It is also a good mechanism for involving undergraduates in research early; I believe there are interesting projects and important questions which can be answered by students at all levels. Finally, teaching is a great way to hone presentation and communication skills and also to re-organize one's understanding of the material providing fresh perspective.

Teaching Experience

I was fortunate to have the opportunity to assist my PhD advisor, Oren Etzioni, in teaching the undergraduate machine learning course at the University of Washington on two separate occasions. One of these was the first time my advisor had taught this particular course, and also only the second time it had been offered at UW. I therefore had the opportunity to have significant influence in designing the homeworks and also helped to write questions for the test. In addition, I gave an hour long lecture on neural networks in class, which I found to be a very enjoyable experience.

Since joining The Ohio State University as an assistant professor in September, I have independently taught two courses. I am making all the materials freely available online.[1][2] The first was a seminar class on my research area (*Information Extraction and Natural Language Processing for the Social Web*) for 14 graduate students. The class involved students reading, presenting and discussing recent research papers. One technique I learned from courses with a similar structure at the University of Washington is to ask students to submit a short paper critique to an online discussion forum before each class. This gets the students thinking critically about the papers and they enjoyed seeing each other's comments. The forum posts led to very engaging discussions that often went over the aloted time for the class, even after I announced the class period had ended and students were free to leave if they chose.

The second class I am (currently) teaching is a more traditional lecture-based class to 42 undergraduate and gradaute students on advanced techniques in artificial intelligence. The course covers topics such as probability, statistical learning and inference in probabilistic models. While teaching a new class is a time consuming activity, I find it incredibly enjoyable and exciting. Teaching is helping to improve my presentation skills and I find thinking about how best to present the material to students seeing it for the first time to be a very rewarding experience.

[1] `http://aritter.github.io/courses/5539.html`
[2] `http://aritter.github.io/courses/5522.html`

Mentoring Experience

I am very excited to mentor students and do whatever I can to help them become sucessful scientists who develop their own independent research agendas.

As a PhD student at UW I had the opportunity to mentor Sam Clark during his senior year and masters program. I supervised Sam's work annotating a corpus of tweets and building a part of speech tagger and chunker for Twitter. I feel this is a great example of an appropriate project for a bright student interested in learning about a new field (NLP), as it has a clear objective and also results in a self-contained and useful end-result. This helps to give the student some sense of accomplishment and provides them with a clear contribution they can describe when applying for jobs. Sam went on to work as a data mining engineer for *Decide.com*, a Seattle startup company, which was recently aquired by Ebay.

While a postdoctoral fellow at CMU I helped to mentor several PhD students: Justin Betteridge, Xinlei Chen and Jiwei Li; I found the students at CMU were a pleasure to work with. At Ohio State I am currently advising 2 PhD and 3 masters students. I am serving on the thesis comittees of 4 PhD students at OSU and also Youngbum Kim's committee at Wisconsin.

Teaching Interests

I would be very excited to teach or co-teach a wide variety of courses in the Language Technologies Institute for both undergraduate and gradaute students, including: Natural Language Processing (11-611), Analysis of Social Media (11-72), Machine Translation (11-731), Algorithms for NLP (11-711), Machine Learning for Text Analysis (11-443) and more. I would also be interested to organize research seminars covering recent work in information extraction, knoweldge base population, lexical semantics and language processing in social media.