

## Teaching statement of Jonathan May

I derive particular delight and satisfaction from helping those who are eager to learn but have little to no background in a particular domain or are otherwise disadvantaged. For example, I was the teaching assistant for CSCI 562: Empirical Methods in Natural Language Processing, a graduate-level course taught by Kevin Knight, in the fall of 2006. The course teaches key concepts in current NLP research, beginning with foundations in probability theory and basic linguistics, continuing with methods of corpus-based empirical learning such as the construction of language models, smoothing, and the EM algorithm, and concluding with discussion of complete applications such as parsing and machine translation.

Most of the students were new to the field, often in their first semester of study. As TA, I taught lectures on probability theory and the EM algorithm, designed and graded homework, and consulted with students regularly. In my lectures and when working one-on-one with students, I explained difficult topics through the use of simplification and metaphor. This tactic helped these students appreciate the material and ultimately do well in the course. I apply similar strategies to my conference presentations and invited talks, particularly those where I face an audience with a background different from my own.

Teaching and learning opportunities occur outside of the classroom as well. Conference paper review, when done with dedication, is particularly helpful, especially to graduate students and newcomers to a field. As many readers of this document will know, a good deal of papers submitted for review are written poorly and are not worthy of acceptance. The authors frequently have deficits in English writing skills, correct scientific methodology, and descriptive style. In short, they need to be taught to be better researchers. Unfortunately, however, many reviewers spend insufficient time and energy providing feedback. These promising, though flawed, students are thus not taught properly and, in fact, are discouraged from continuing when they receive a terse, unhelpful review written by an expert who has little regard for all but the perfect paper.

Recognizing this deficit, I have made a personal goal of improving paper review in academia. I apply the principles I use in the classroom to my own reviews, and I urge my colleagues to do the same. The results so far are quite positive. The authors of a paper I rated negatively for the Association for Computational Linguistics conference in 2008 contacted the conference area chair to tell her how much they enjoyed my critique, and that they were proceeding with my suggestions in their subsequent work. I was told that initiating such contact is unusual. In order to encourage quality reviewing I proposed a Best Reviewer award at the ACL annual meeting, which was met with applause from the membership. For the past three years I have received the Best Reviewer award at our department's graduate student colloquium, and have encouraged others to compete against me to raise the level of review. It is my hope that these efforts will inspire reviewers to take more time to provide feedback, and that as a result the overall quality level of submissions to conferences and journals in the field of computational linguistics will improve.

I relish the opportunity to teach an undergraduate-level course in computer science fundamentals, as well as a graduate-level seminar in NLP. I have benefited from good teachers at these levels in my own education and enjoy passing the love of learning to impressionable minds. I will also continue to champion efforts to encourage dedicated paper review. Fewer tasks are more difficult than conducting interesting original research and clearly describing it. We can teach novice researchers these skills by taking time to provide thoughtful, thorough instruction.