Esty Recruitment team

December 2, 2016

Dear Sir or Madam,

I write to apply for a summer intern position advertised as "Data Science Intern (New York)" at Esty. I believe I have much to offer the advertised position. I work on cutting edge of software analytics and empirical software engineering, which is more like data science in software engineering.

In my research, I explore how to build predictive models that can be tuned to better solve specific software problems. By using search-based algorithms(e.g, differential evolution) to tune parameters, I find that predictive models(tree-based algorithms, SVM's) for defect prediction can be improved a lot; and also it's much faster and better than grid search in terms of runtime and performance scores, which is widely used in the community. In addition, DE-based parameter tuning can improve the stability scores of topic modelling technique(e.g, LDA).

I'm also a technique fan. My ongoing project is to apply deep learning techniques to understand the APP reviews and build a recommendation system for software developers. At the same, I'd like to investigate whether deep learning is a killer technique(which seems true for CV and NLP community) for software analytics. Based on my preliminary results, the resource extensive deep learning is not better than regular machine learning with parameter tuning on software text classification problems. A lot of open questions need to address there.

Even though I'm not a machine learning algorithm guy but software research guy, I like to apply the data science techniques I have learned and used previously to solve practical problems in other fields. And I've never worked on any HUGE data in software community, your Esty data will make me excited. Further, I'd like to take challenge and fix problems. If that is a possibility, and if you wish to further discuss the potential of my work at Esty, please contact me at the email or phone number listed above.

Yours faithfully,

Wei Fu

Attached: curriculum vitæ