

Xin Zhang — Achievement 3

One of the most fulfilling experiences I had during my graduate study was to mentor students on research. I had the opportunities to work with two junior PhD students and an MS student, on three different research projects, which led to publications at CP'16, OOPSLA'16, and AAAI'16 respectively. The three students have diverse backgrounds and I guided them accordingly based on their strengths and weaknesses. One PhD student joined the PhD program after obtaining a Master's and was very technically solid, but a bit raw in terms of defining problems and writing. As a result, I helped brainstorm on the problem definition and write parts of the paper, but left most of the technical challenges to the student himself. The other PhD student returned to graduate school after decades of industry experience and had a harder time working out the theoretical part of the project. Consequently, I was highly involved in developing the theories of the paper by constantly giving detailed feedback to her. For instance, it took us ten iterations of feedback and revision to prove the most important theorem. As for the MS student, he was the most junior and needed more training before leading a research project. As a result, we assigned him well-defined sub-problems of the project and at the same time let him observe how senior PhD students conduct research. I consider it a major achievement that all three students got their first publications since they joined the program via our interaction.