



College of Natural Sciences
Computer Science

2317 Speedway, Stop D9500 • Austin, Texas 78712 • T: 512.471.7316 •
www.cs.utexas.edu

June 19, 2020

Re: Mr. Yanxin Lu

To Whom It May Concern:

My name is Swarat Chaudhuri. I hold the position of Associate Professor at University of Texas at Austin, in Austin, Texas. From 07/2011 to 12/2019, I held the position of (former position) at Rice University in Houston, Texas. This letter serves to confirm that Mr. Yanxin Lu was a student of Rice University, in Houston, Texas, from August 25, 2012, through May 10, 2019. Mr. Lu was awarded a Master's of Science degree in Computer Science on December 30, 2015. I was Mr. Lu's Academic Advisor and have personal knowledge and/or possess records under my control to reflect the education history of Mr. Lu.

During his graduate degree studies, Mr. Lu completed a university-level thesis involving each of the following:

1. C, C++ and Java;
2. Python and PHP;
3. Relational databases and SQL;
4. Software development tools: Code editors (VIM and Emacs), and revision control systems (Subversion, GIT and Perforce);
5. Linux and UNIX as evidenced by file manipulation, advanced commands, and shell scripting;
6. Core web technologies: HTML, CSS, and JavaScript;
7. Building highly-scalable performant solutions;
8. Data processing, programming languages, databases, networking, operating systems, computer graphics, or human-computer interaction;
9. Applying algorithms and core computer science concepts to real world systems as evidenced by recognizing and matching patterns from different areas of computer science in production systems; and
10. Distributed systems.

A summary of the thesis is as follows.

Master thesis: Improving Peer Evaluation Quality in Massive Open Online Courses:

As several online course providers such as Coursera, Udacity and edX emerged in 2012, Massive Open Online Courses (MOOCs) gained much attention across the globe. While



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MOOCs provide learning opportunities for many people, several challenges exist in the context of MOOC and one of those is how to ensure the quality of peer grading. Interactive Programming in Python course (IPP) that Rice has offered for a number of years on Coursera has suffered from the problem of low-quality peer evaluations. In this thesis, we propose our solution to improve the quality of peer evaluations by motivating peer graders. Specifically, we want to answer the question: when a student knows that his or her own peer grading efforts are being examined and they are able to grade other peer evaluations, do those tend to motivate the student to do a better job when grading assignments? We implemented a web application where students can grade peer evaluations and we conduct a series of controlled experiments. Finally, we find a strong effect on peer evaluation quality simply because students know that they are going to be studied using a software that is supposed to help with peer grading. In addition, we find strong evidence that by grading peer evaluations students tend to give better peer evaluations. However, the strongest effect seems to be obtained via the act of grading others' evaluations, and not from the knowledge that one's own peer evaluation will be examined.

If you should have any questions regarding Mr. Lu's studies at Rice University, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Swarat", written over a horizontal line.

Swarat Chaudhuri

Associate Professor
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