

Yanxin Lu

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Experience

- Research Scientist at Facebook Inc., Menlo Park, CA January 2019 - present
Conducting research on improving developer efficiency in developing Virtual Reality softwares
- Internship at Facebook Inc., Menlo Park, CA Summer 2017
Worked on a research project which generates programs for finding bugs in Flow.
GitHub: <https://github.com/facebook/flow/tree/master/testgen>
Mentor: Satish Chandra
- Internship at Grammatech Inc., Ithaca, NY Summer 2015
Worked on a research project where the goal is to use a large code corpus to automatically complete partial programs in C.
- Temporary Instructor in Data Structures and Algorithms in Guangzhou, China Summer 2012
Taught data structures and algorithms for National Olympiad in Informatics programming contest.
- 5th Place in ACM South Central USA Region Programming Contest Fall 2010, Fall 2011

Education

- Rice University August 2012 - May 2019 (Expected)
Doctor of Philosophy in Computer Science
Advisor: Swarat Chaudhuri
Thesis: Corpus-Driven Systems for Program Synthesis and Refactoring
- Rice University December 2015
Master of Science in Computer Science
Advisor: Swarat Chaudhuri
Thesis: Improving Peer Evaluation Quality in Massive Open Online Courses
- Baylor University May 2012
Bachelor of Science in Computer Science
Cum Laude

Projects

- API Refactoring Using Natural Language Spring 2018 - Current
Design and implement an algorithm that uses existing source code with documentation to automatically refactor API sequences
- Program Splicing Spring 2014 - Fall 2018
Design and implement an algorithm which automatically completes partial programs using a large collection of source code.
This is a project under Pliny (<http://pliny.rice.edu>).

- Peer Evaluation Grading System for Massive Open Online Course Spring 2013 - Fall 2014
Designed and implemented a web application for thousands of students to grade peer evaluations in MOOCs and analyze its effect on peer evaluations.
- Autograder for Graphical Programming Assignments Written in Python Fall 2012 - Spring 2014
Designed and implemented an algorithm which grades graphical programs in MOOCs automatically.
- **Mfinder**: Visualizing the Functional Association Pattern of a Gene Fall 2011 - Spring 2012
Designed and implemented a web application for visualizing gene functional associate patterns.
URL: <http://bionet.ecs.baylor.edu/mfinder>

Publications

- Yanxin Lu, Swarat Chaudhuri, Christopher Jermaine, David Melski. Program Splicing, 40 International Conference on Software Engineering (ICSE), 2018
- Yanxin Lu, Joe Warren, Christopher Jermaine, Swarat Chaudhuri, Scott Rixner. Grading the Graders: Motivating Peer Graders in a MOOC, 24th International World Wide Web Conference (WWW), 2015
- Anna Drummond, Yanxin Lu, Swarat Chaudhuri, Christopher Jermaine, Scott Rixner and Joe Warren. Learning to Grade Student Programs in a Massive Open Online Course, IEEE International Conference on Data Mining, 2014
- Young-Rae Cho, Marco Mina, Yanxin Lu, Nayoung Kwon and Pietro H Guzzi. M-Finder: Uncovering functionally associated proteins from interactome data integrated with GO annotations, Proteome Science, 11(Suppl 1):S3, 2013.
- Young-Rae Cho, Tak Chien Chiam and Yanxin Lu. M-Finder: Functional association mining from protein interaction networks weighted by semantic similarity, IEEE International Conference on Bioinformatics and Biomedicine, 2012.