

# Yanxin Lu

1000 Escalon Ave #K2087  
Sunnyvale, CA 94085

Phone: +1-254-224-1457  
Email: yanxin@luyanxin.com

## 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

## Experience

- Internship at Facebook Inc., Menlo Park, CA Summer 2017  
Worked on a research project which generates programs used to test and find bugs in type checkers.  
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

## 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.

## 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>