Darya Verzhbinsky

Education

Sept '17 –
June '21
BS Computer Science, *UC San Diego*, La Jolla.
Advisor: Nadia Polikarpova

Research

June '20 –
present
Undergraduate Researcher, *UC San Diego - CSE Department*, La Jolla, CA.
Advisor: Nadia Polikarpova
- Working with **Hoogle**$^+$ team
- Building type-guided top-down enumerative synthesis tool for fully polymorphic and higher-order programs in Haskell
- Submitted 3-page abstract to Student Research Competition at POPL '21

Sept '18 –
June '19
Student Researcher, *UC San Diego - CSE Department*, La Jolla, CA.
Program: Early Research Scholars Program
Advisor: Jishen Zhao
- Targeted the exploration of various software caching mechanisms in key-value store database on SSD using C++ and Linux
- Analyzed the access patterns of various applications and aimed to identify bottlenecks of Linux's `mmap()` system call
- Presented research at the UCSD CSE Research Expo

Teaching

Sept '18 –
Present
Computer Science Tutor, *UC San Diego - CSE Department*, La Jolla, CA.
- Tutor for:
  - Intro to Computer Science - Java + Python *(FA '18, FA '19, FA '20)* (current)
  - Programming Languages *(WI '20, SP '20)*
  - Intro to Discrete Mathematics *(SP '19)*
  - Basic Data Structures and OOD - Java + C *(WI '19)*
- Duties include:
  - managing the schedules of the tutoring staff's office hours
  - writing and grading programming assignments/exams
  - coordinating an effort to engage struggling students with course staff
  - holding office hours for students to get help on assignments

Jun '18 –
Aug '18
Assistant Teacher, *Girls Who Code*, Mountain View, CA.
Program: Summer Immersion Program
- Instructed a classroom of 20 high school girls on the basics of Computer Science in:
  Scratch • Python • Arduino C / Robotics • Web Development • Data Science • Algorithms
- Held college admission workshops throughout the summer for students who were incoming seniors
- Facilitated the development of several full-stack projects

Industry

June '19 –
Sept '19
Engineering Practicum Intern, *Google*, Sunnyvale, CA.
- Worked on **KUnit** dev team, which is a unit testing tool for the Linux Kernel
- Improved test coverage for `kunit_tool` by 20%
- Integrated line coverage results into `kunit_tool` through Prow's presubmit tool using GCOV and LCOV
- Implemented incremental coverage as part of line coverage reporting

Submissions / Presentations

June 2020	PETSY: Polymorphic Enumerative Type-Guided Synthesis **[pdf]** *(in review)*	*POPL SRC '21*
June 2019	Exploring Performance of Memory Mapping **[poster]**	*UCSD CSE Research Expo*

Awards / Scholarships

2019	Internship Symposium Award for Achievements in Personal & Professional Growth	*UCSD*
2019	Grace Hopper Conference Scholarship Winner	*Google*
2018	Full Scholarship Winner for Grace Hopper Conference	*UCSD Women in Computing*

Service

ICFP '20	Student Volunteer	*Virtual Conference*
PLDI '20	Student Volunteer	*Virtual Conference*
POPL '20	Student Volunteer	*New Orleans, LA, USA*

Tools & Languages

Haskell • C/C++ • Java • Python • Clojure • HTML/CSS • Latex • Vim • Docker