Darya Verzhbinsky

Education

Sept '21   **PhD Computer Science**, *University of Washington*, Seattle, Washington.
       Advisor: Ras Bodik

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

Research

Jan '20 –   **Undergraduate Researcher**, *UC San Diego - CSE Department*, La Jolla, CA.
present   ***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 - won 1st place

Sept '18 –   **Student Researcher**, *UC San Diego - CSE Department*, La Jolla, CA.
June '19   ***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 –   **Computer Science Tutor**, *UC San Diego - CSE Department*, La Jolla, CA.
Present
- Tutor for:
  - Programming Languages *(WI '20, SP '20, SP '21)* (current)
  - Intro to Computer Science - Java + Python *(FA '18, FA '19, FA '20, WI '21)*
  - 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 –   **Assistant Teacher**, *Girls Who Code*, Mountain View, CA.
Aug '18   ***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 – **Engineering Practicum Intern**, *Google*, Sunnyvale, CA.
Sept '19 ○ 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]** *POPL SRC '21*

June 2019 Exploring Performance of Memory Mapping **[poster]** *UCSD CSE Research Expo*

Awards / Scholarships

2021 1st place, Student Research Competition - Undergraduate *POPL 2021*

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