

# Sarah Lim

Northwestern University, Evanston, IL, USA  
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## RESEARCH INTERESTS

Human-computer interaction (HCI), programming languages, software engineering, computing education.

## EDUCATION

Jun 2018    **Northwestern University**, B.A. Computer Science, *summa cum laude*  
Graduate-level coursework: Code Analysis and Transformation, Type Systems, Probabilistic Graphical Models, Graduate Algorithms, Systems Programming in Rust

## EXPERIENCE

- Jul 2018 – Present    **Microsoft Research**, Cambridge, UK    Host: Gavin Smyth  
*Research Intern, Human Experience and Design Group*  
Designing and prototyping technologies for discovering and remixing digital possessions, and augmenting remote collaboration with machine vision.
- Apr 2015 – Jun 2018    **Northwestern University**, Evanston, IL    Advisors: Haoqi Zhang, Nell O'Rourke  
*Undergraduate Researcher, Delta Lab*  
Designed, built, and evaluated novel techniques and tools to help learners inspect professional webpage source code.
- Jan 2018 – Jun 2018    **Northwestern University**, Evanston, IL    Advisor: Jason Hartline  
*NSF REU, Peer Grading*  
Developed algorithms for estimating peer reviewer skill based on reported grades.
- Jun 2017 – Sep 2017    **Khan Academy**, Mountain View, CA  
*Software Engineering Intern, Coaches and Coached Learning Team*  
Rebuilt exercise reports to help teachers visualize class progress and attempt history. Added experimental step-through debugging to the Computer Programming editor.
- Jan 2017 – Apr 2017    **Northwestern University**, Evanston, IL    PI: Uri Wilensky  
*Research Assistant, Center for Connected Learning*  
Modified the NetLogo Web multi-agent modeling platform, adding experimental support for non-blocking model compilation using Web Workers.
- Jun 2016 – Sep 2016    **LinkedIn**, Sunnyvale, CA  
*Software Engineering Intern, Recruiter Team*  
Wrote, tested, and documented SVG time-series charting extension, replacing Highcharts in production. Assisted the design of recruiter similarity algorithms.
- Sep 2013 – Jun 2014    **University of Washington**, Seattle, WA    Supervisor: Alia Martin  
*Research Assistant, Early Childhood Cognition Lab*  
Ran and coded eye-tracking studies on prosocial behavioral development in infancy.

## AWARDS AND HONORS

- 2018 Outstanding Senior in Computer Science
- 2017 CHI Student Research Competition, First Place  
Microsoft Tuition Scholarship
- 2016 Google Lime Scholarship  
Box Engineering Diversity Scholarship  
Palantir Women in Technology Scholarship  
The Alumnae of Northwestern STEM Scholarship  
Northwestern Undergraduate Research Grant
- 2015 Milton S. Florsheim Prize for Excellence in Debate
- 2014 National Merit Scholarship  
Alice Kaplan Humanities Scholar

## TRAVEL GRANTS

- 2018 Programming Languages Mentoring Workshop (ICFP)
- 2017 EECS Department Conference Travel Grant (CHI)  
Office of Undergraduate Research Conference Travel Grant (CHI)  
Weinberg College of Arts and Sciences Conference Travel Grant (CHI)
- 2016 SC16 Experiencing HPC for Undergraduates Program  
Google Travel Sponsorship (GHC)

## REFEREED CONFERENCE PAPERS

**Sarah Lim**, Joshua Hibschan, Haoqi Zhang, Eleanor O'Rourke. Ply: A Visual Web Inspector for Learning from Professional Webpages. UIST 2018, to appear.

## EXTENDED ABSTRACTS

Sarah Lim. Ply: Visual Regression Pruning for Web Design Source Inspection. CHI 2017 Extended Abstracts, May 2017. **First Place, CHI SRC**

## PRESENTATIONS AND TALKS

- 2017 Big Ideas Forum: How We Learn About Learning. Northwestern University, Evanston, IL. May 2017.  
Ply: Visual Regression Pruning for Web Design Source Inspection. CHI Student Research Competition, Denver, CO. May 2017.
- 2016 Guided CSS Inspection Using Tutorial Keyword Frequency. Google Scholars' Retreat, Mountain View, CA. June 2016.

## TEACHING ASSISTANT EXPERIENCE

- Fall 2015 – Winter 2018 EECS 111: Fundamentals of Computer Programming I (6 quarters)  
*Head Teaching Assistant*
- Spring 2016 – 2018 EECS 214: Data Structures and Data Management (3 quarters)
- Spring 2018 EECS 397: Software Construction
- Fall 2017 EECS 474: Probabilistic Graphical Models (graduate-level course)

## PROGRAM AND DEPARTMENTAL SERVICE

Sep 2017 – Present    Onboarding Committee (Co-Chair), Design, Technology, and Research (DTR)  
Sep 2016 – Present    Student Advisory Board, Weinberg College of Arts and Sciences  
Sep 2016 – Jun 2017    Curricular Review Committee, Weinberg College of Arts and Sciences

## SKILLS AND FAMILIAR APIS

*>10k LOC*    JavaScript, Python, HTML, CSS  
*1-10k LOC*    C++, Rust  
*<1k LOC*    C, C#, Java, Racket

*Data*    NumPy, pandas, matplotlib, Seaborn  
*Web*    React, Ember.js, Redux, GraphQL, Node.js  
*Code Analysis*    LLVM, Esprima  
*Browser SDK*    Chrome Remote Debugging Protocol, Chrome extensions, Firefox WebExtensions  
*Document Preparation*    L<sup>A</sup>T<sub>E</sub>X, Markdown, Pandoc  
*Design*    Sketch, Photoshop, Illustrator