

Audrey Seo

PHD STUDENT · UNIVERSITY OF WASHINGTON COMPUTER SCIENCE & ENGINEERING

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Education

University of Washington

Seattle, WA

PHD IN COMPUTER SCIENCE AND ENGINEERING

September 2020 - present

- GPA: 4.0
- Advisor: Professor Dan Grossman

Wellesley College

Wellesley, MA

BA IN COMPUTER SCIENCE AND MATHEMATICS (HONORS)

August 2016 - May 2020

- GPA: 3.72, graduated magna cum laude

Professional Experience

- 2020 - present **Graduate Research Assistant**, CSE, University of Washington
- Summer 2020 **Summer Calculus I & II Tutor**, Math Dept., Wellesley College
- 2018 - 2020 **Mathematics Tutor**, Math Dept., Wellesley College
- 2018 - 2020 **Undegraduate Research Assistant**, CS Dept., Wellesley College
- Spring 2018 **Algorithms Tutor**, CS Dept., Wellesley College

Publications

PUBLISHED

Evan Patton, **Audrey Seo**, Franklyn Turbak. 2019. “Enhancing Abstraction in App Inventor with Generic Event Handlers.” IEEE Blocks and Beyond Workshop. http://audreyseo.github.io/files/blocks_and_beyond.pdf.

Audrey Seo. 2018. “Abstractionless Programming in App Inventor.” ACM SPLASH BLOCKS+ Workshop. <http://audreyseo.github.io/files/blocksplus18-paper19.pdf>.

IN REVIEW

Eunice Jun, **Audrey Seo**, Jeffrey Heer, René Just. 2022. “Tisane: Authoring Statistical Models via Formal Reasoning from Conceptual and Data Relationships.” ACM CHI.

Awards, Fellowships, & Grants

2020-2021 **Edna V. Moffett Fellow**, Wellesley College Graduate Fellowships

Presentations

WORKSHOP PRESENTATIONS

Audrey Seo. 2019. “Enhancing Generics in App Inventor with Generic Event Handlers.” VLHCC: Blocks and Beyond Workshop, Memphis, TN. Conference and Poster Presentation.

Audrey Seo. 2018. “Abstractionless Programming in App Inventor.” SPLASH BLOCKS+ Workshop, Boston, MA. Conference and Poster Presentation.

DEPARTMENT & PROGRAM PRESENTATIONS

Audrey Seo. 2019. “Automatic Refactoring of Robotics Code.” Carnegie Mellon University, Institute for Software Research: REUSE Poster Session. Pittsburgh, PA. Poster Presentation.

Audrey Seo. 2018. "Abstractionless Programming in App Inventor." Science Center Summer Research Poster Session. Wellesley, MA. Poster Presentation.

Paige Robinson, Keiko Hilmo, Daniela Gomez, **Audrey Seo.** 2018. *Girls' Generation? A Linguistic Analysis of Gender Representation in Modern South Korea.* "Social Labeling of Women In South Korea: Culturally Deleting Women's Identities." Wellesley College Ruhlman Conference. Wellesley, MA. Conference Presentation and Panel.

Research Experience

University of Washington - CSE

ADVISOR: PROF. DAN GROSSMAN

- Project: Transferring proofs of source code to proofs of compiled code in a different target language

Seattle, WA

Sep. 2020 - present

University of Washington - CSE

MENTOR: EUNICE JUN

- Project: Statistical tools for non-experts in statistics

Seattle, WA

Jul. 2021 - present

Wellesley College - CS Dept.

ADVISOR: PROF. BENJAMIN WOOD

- Project: Designing a DSL for pattern matching on students' homework problems in an autograder

Wellesley, MA

Sep. 2019 - Mar. 2020

Wellesley College - CS Dept.

ADVISOR: PROF. FRANKLYN TURBAK

- Project: Analyzing millions of MIT App Inventor projects for code smells

Wellesley, MA

Jun. 2018 - Sep. 2019

Carnegie Mellon University - CS Dept.

ADVISOR: DR. RUBEN MARTINS

- Project: Using program synthesis to automatically refactor robotics code

Pittsburgh, PA

May - Aug. 2019

Outreach & Professional Development

SERVICE AND OUTREACH

Sep. 2021 - present **UW CSE Pre-Application Mentor Service (PAMS), PAMS Mentor**

Seattle, WA

Sep. 2020 - Jul. 2021 **UW CSE Pre-Application Review Service (PARS), PARS Leader and Organizer**

Seattle, WA

- Organized program where current PhD students would read potential PhD applicants' statement of purpose (SOP) drafts to help them apply to competitive CS programs
- Assisted potential applicants with SOP drafts and CV's and targeted students from under-represented minorities in order to help them strengthen their application
- Brainstormed with other leaders and organizers to create the first iteration of PARS and helped to shape the next iteration, PAMS

UW COMMUNITY

2021 - present **UAW 4121, Steward representing academic student workers in CSE**

Seattle, WA

2020 - present **UW CSE Care Committee, Volunteer and coordinator**

Seattle, WA

- Organize distribution of care packages
- Decrease stigma of mental illness and treatments among CSE community

Winter 2021 **UW CSE Book Club for First Years, Coordinator**

Remote

- Created book club for fellow first years to read Philip Guo's memoir *The PhD Grind*
- Due to the isolation of remotely starting the PhD, first year students were at high risk of feeling alone, so this book club provided a place for first years to get to know each other and commiserate about shared experiences in a healthy way

PROFESSIONAL MEMBERSHIPS

Society of Women Engineers

Sigma Xi (*Invited*)