

# Olivia Richards



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## Objective

To leverage skillset in quantitative analysis and human computer interaction (HCI) research to enhance the user experience; To obtain Ph.D. in HCI from an exceptional research institution

## Education

**The Pennsylvania State University; University Park, PA**

Bachelor of Science, Mathematics; Millennium Scholar, Class of 2019, GPA: 3.81

## Experience

**University of Washington; Seattle, WA- Summer 2018**

Conducted research on digital user experience to reduce the opportunity gap for low-to-middle income families with a mixed methods approach; Conducted semi-structured initial and final interviews with 12 families and introduced digital voice assistant technology into their homes; Scraped, filtered, and analyzed relevant product reviews in a content analysis to understand perspectives and share design opportunities for voice assistants to support all families

**AllianceBernstein; New York, NY – Summer 2017**

Collaborated with software developers and business leadership to design machine learning supported solutions for automation; Documented business requirements for Fixed Income Technology Project Manager; Worked with data scientists to conduct market research; Audited trade processes to mitigate risk for Equities Portfolio Management Group

**Penn State University; University Park, PA- 2016-Present**

**College of Health and Human Development:** Designed mobile application for interdisciplinary group work; Led a deployment study; Conducted focus groups; Analyzed qualitative data;

Analyzed user-data in R to make design recommendations for collaborative technology

**College of Information Sciences and Technology:** Interviewed 20 parents of preschool aged children to examine habit development strategies and make design recommendations for family tracking technology

**Indiana University; Bloomington, IN – Summer 2016**

Observed older adult communities and organized participatory design activities to support the creation of electronically enhanced devices using Arduino C

## Leadership Experience

Penn State

**Teaching Assistant, Smeal College of Business— January 2017- Present**

Hold office hours and lab sessions to assist 300+ students in Statistics; Grade assignments; Distribute, proctor, and collect exams while maintaining a fair testing environment

**Presidential Leadership Academy– May 2016- Present**

Collaborate with University peers to assist both Penn State's President and Schreyer Honors College's Dean to discuss and enhance the student experience, while honing decision-making and critical thinking skills

**Cohort Council, Millennium Scholars Program– June 2015- May 2018**

Designed program activities and events for merit scholar students with plans to pursue advanced degrees in science, technology, engineering and mathematics; Served as Treasurer

### Resident Assistant – January 2017- May 2018

Fostered community, and diversity, in STEM-focused residence hall, collaborated with staff to organize programs, and mentored 40 residents as they navigated personal and academic opportunities and challenges

### Publications

- 1) Siek, Jelen, **Richards**, Dunbar and Monsey. "Utilizing the Affinity Research Group Model in a Summer Research Experience for Undergraduates Program." 50th ACM Technical Symposium on Computer Science Education. *ACM*, 2019. (Accepted- To Appear)
- 2) **Richards**. "Exploring the Empowerment of Older Adult Creative Groups using Maker Technology." In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems, pp. 166-171. *ACM*, 2017.

### Skills

**Research:** semi-structured interview study, observation, qualitative and quantitative data analysis, surveys, CrimsonHexagon, cognitive walkthrough

**Design:** persona creation, rapid prototyping, wireframes, scenario design, usability testing

**Software and Programming Languages:** Microsoft Office, Python, Arduino C, R

### Reviewer

CHI Conference on Human Factors in Computing Systems 2018

### Presentations

**Project 1:** Parent's Perspectives of the *Benefits and Burdens of Digital Home Assistants*: Grace Hopper Celebration of Women in Computing, Houston, TX. September 2018

**Project 2:** *Deliberate Parenting Practices for Child Development*: Undergraduate Research Exhibition, Penn State. April 2018

**Project 3:** *Exploring the Empowerment of Older Adult Creative Groups using Maker Technology*: CHI 2017, Denver, Colorado. May 2017 | Undergraduate Research Exhibition, Penn State. April 2017 | CUR NSF REU Symposium; Arlington, Virginia. October 2016 | Summer REU Symposium; Indiana University. August 2016

### Honors & Awards

2018 Grace Hopper Celebration, Selected Poster Presenter

2018 Computing Research Association DREU, Selected Participant

2018 Penn State 2018 IdeaMakers Startup Challenge, Finalist

2018 Georgia Tech FOCUS Program, Selected Participant

2017 ACM CHI Student Research Competition, Finalist, 2nd place

2016 PA NASA Space Grant Undergraduate Research Program, Grant

2016 President's Freshman Award (Cumulative 4.0 GPA)

### Community Involvement

Penn State University Dance Marathon (THON), Volunteer, Cadet; 2015-Present

Penn State Eberly College of Science, Climate & Diversity Committee, Undergraduate Representative; 2015-Present

Penn State Science LionPride, Eberly College of Science Ambassador; 2015-Present

### Other Work Experience

Wegmans Food Markets, Customer Service Desk Representative; 2012-Present

Penn State, Economics Grading Assistant; 2016-2017