

HUSKYADAPT

ACCESSIBLE DESIGN AND PLAY TECHNOLOGY

ANNUAL REPORT 2019-2020

Published on August 15, 2020







HUSKYADAPT AT A GLANCE



MISSION

HuskyADAPT fosters an **inclusive**, **sustainable**, and **multidisciplinary community** supporting accessible design and play technology through toy adaptation, design, and community engagement.



TOY ADAPTATION

Adapting and donating accessible toys to clinics, schools, and families





DESIGN

Identifying accessibility needs and developing solutions

COMMUNITY ENGAGEMENT

Engaging with community members such as K-12 students, clinicians, engineers, and teachers to adapt toys or design

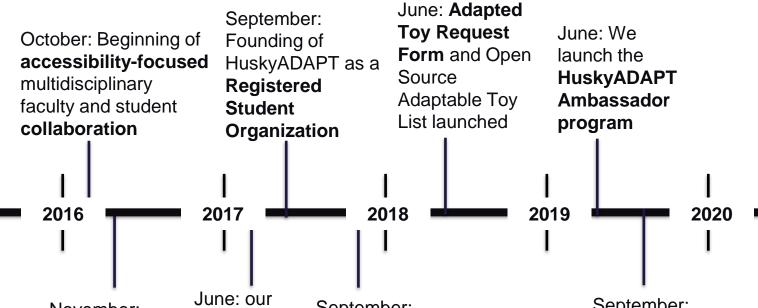


HISTORY OF HUSKYADAPT

The interdepartmental student-faculty collaborations that laid the groundwork for HuskyADAPT began in October 2016. Since then, we have grown, launching and improving programs each year. Some highlights are shown on the timeline below.



TIMELINE



November: our first oncampus and offcampus toy adaptation events June: our work is presented at a conference for the first time

September: HuskyADAPT curricular and extracurricular design teams are launched September:
HuskyADAPT
"Community
Engagement"
formally launched

TOY ADAPTATION: WAS AN OVERVIEW

WHY?

Toys are developmentally important, but not all toys are accessible to all users. We adapt toys, adding an alternative activation port so that the toy can be activated in ways that work for more users.



BY THE NUMBERS

Toy adaptation is a win-win. It benefits the toy recipient and it benefits student toy adapters by teaching them technical and conceptual skills and engaging them in broader conversations about accessibility and inclusivity.

From 2016-2020:



416 UW STUDENTS HAVE LEARNED TOY ADAPTATION



690 Toys have been adapted



60 Toy adaptation workshops have been held

TO LEARN MORE, VISIT OUR WEBSITE AT <u>DEPTS.WASHINGTON.EDU/ADAPTUW</u> OR CONTACT US AT <u>ADAPTUW@uw.edu</u>

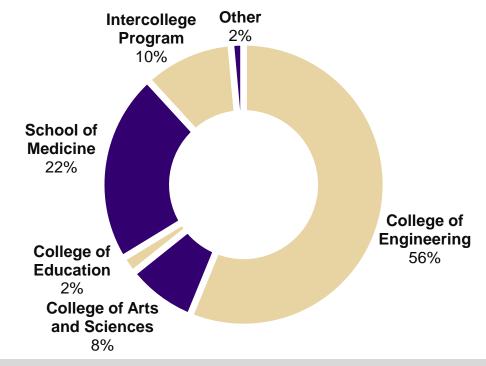
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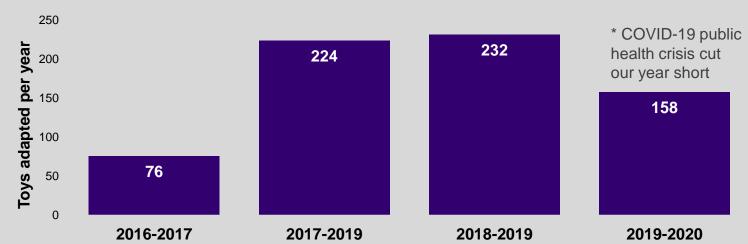
TOY ADAPTERS & TAY PRODUCTION

WHO IS ADAPTING THE TOYS?

70% undergraduate and 30% graduate students from:



HOW MANY TOYS HAVE BEEN ADAPTED?



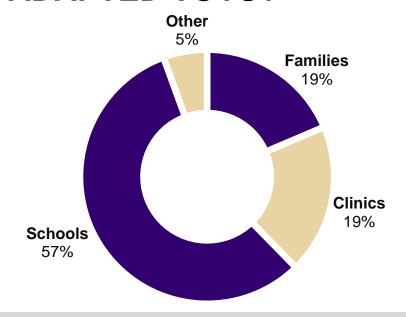
TO LEARN MORE, VISIT OUR WEBSITE AT <u>DEPTS.WASHINGTON.EDU/ADAPTUW</u> OR CONTACT US AT <u>ADAPTUW@uw.edu</u> _______

TOY DONATION: WHO AND WHERE?

WHO RECEIVES THE ADAPTED TOYS?

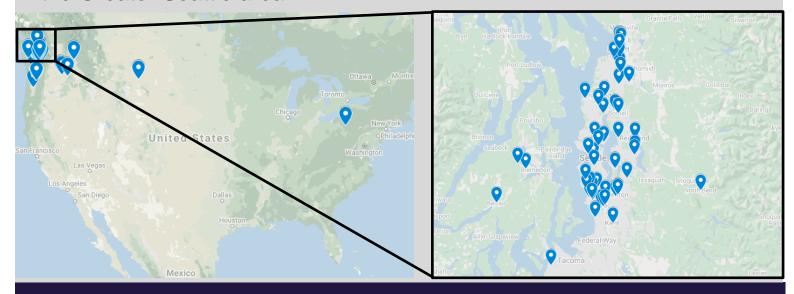
We donate toys at no cost to families, schools, clinics, and more in the Seattle area.

If you are interested in receiving a free adapted toy, please complete the form on our website > toy adaptation > request adapted toys.



WHERE DO THE ADAPTED TOYS GO?

Toys have been donated to **80** unique locations nationwide, mostly in the Greater Seattle area.



DESIGN: AN OVERVIEW



WHY?

Toys aren't the only items inaccessible to all users. We create and mentor design teams who work with community codesigners to define and develop solutions to accessibility problems in our community.



BY THE NUMBERS

Design has the opportunity to make our community and our world more accessible while also teaching students technical and conceptual skills and engaging them in broader conversations about accessibility and inclusivity.

From 2017-2020:



 $202\,\text{UW}$ students have been on a design team



44 DESIGN TEAMS HAVE BEEN CREATED AND MENTORED

TO LEARN MORE, VISIT OUR WEBSITE AT <u>DEPTS.WASHINGTON.EDU/ADAPTUW</u> OR CONTACT US AT <u>ADAPTUW@uw.edu</u>

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DESIGN TEAM PERSONNEL



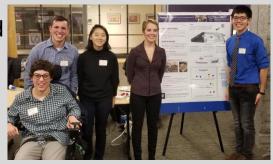
WHO IS ON DESIGN TEAMS?

Teams are multidisciplinary and are composed of undergraduate and graduate students of different majors.



27 UNIQUE MAJORS, MOST COMMONLY:

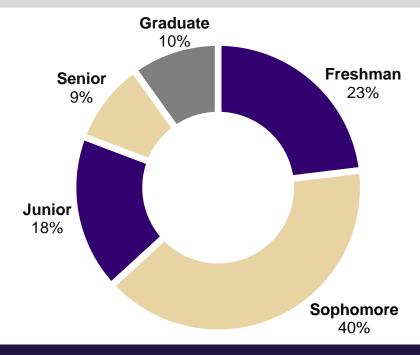
- ENGINEERING UNDECLARED/PRE-ENGINEERING
- HUMAN-CENTERED DESIGN ENGINEERING
- MECHANICAL ENGINEERING
- COMPUTER SCIENCE
- BIOENGINEERING



- ELECTRICAL & COMPUTER
 ENGINEERING
- INFORMATICS
- OCCUPATIONAL THERAPY
- INDUSTRIAL ENGINEERING
- Materials Science & Engineering







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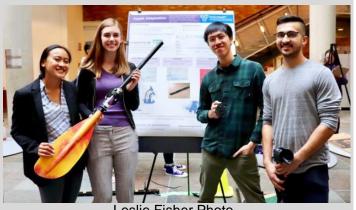
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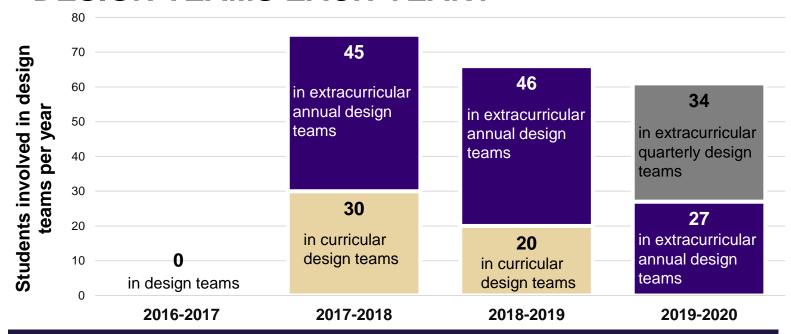
DESIGN BY YEAR

WHAT ARE SOME EXAMPLES OF PROBLEMS TACKLED BY DESIGN TEAMS?

- Kayak adaptation for individuals with upper limb differences
- Oriented stylus for people with muscular impairments or cognitive disabilities
- Adapted Xbox controller for users with less fine motor control
- Fall monitoring device to increase safety and independence
- Bike alignment attachments for individuals with spasticity



HOW MANY STUDENTS HAVE BEEN ON **DESIGN TEAMS EACH YEAR?**



TO LEARN MORE, VISIT OUR WEBSITE AT DEPTS.WASHINGTON.EDU/ADAPTUW OR CONTACT US AT ADAPTUW@uw.edu

COMMUNITY ENGAGEMENT: An Overview



WHY?

Engaging with community members such as K-12 students, clinicians, engineers, and teachers furthers our mission of fostering an **inclusive**, **sustainable**, and **multidisciplinary community** supporting accessible design and play technology.



NEW COLLABORATIONS BY YEAR

2016-2017

Taskar Center for Accessible Technology (TCAT) UW Math Academy Valley Medical Center

2017-2018

Chestnut Hill Academy
Disabilities, Opportunities, Internetworking,
and Technology (DO-IT)
Expanding Your Horizons (EYH) Conference
GoBabyGoSeattle
Inglemoor High School
UW Women in Science & Engineering

2018-2019

American Association of University Women Girl Scouts Infant and Early Childhood Conference King County Library System Microsoft UW Minority Scholars Engineering Program

2019-2020

Google Interlake Saints Robotics Team Lincoln High School St. Margaret's Episcopal School



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COMMUNITY ENGAGEMENT: SPREADING THE WORD



WHERE?

In addition to event collaborations in the Seattle area, we travel to present at conferences and other events.

From 2016-2020:



15 CONFERENCE PRESENTATIONS



10 UNIQUE CITIES



4 PEER-REVIEWED CONFERENCE PUBLICATIONS





HOW ELSE DO WE CONNECT?



1,085 recipients of our newsletter, sent via email every other week



35,000 + views on our Youtube account



ON SOCIAL MEDIA @HUSKYADAPT







HUSKYADAPT TEAM 2019-2020

STUDENT EXECUTIVE BOARD



Molly Mollica, Student Chair



Alyssa Spomer, Toy **Adaptation Chair**



Avry Freaney, Toy Adaptation Chair



Karley Benoff. Design Chair



Will Lin. Design Chair



Collin Pernu, Community **Engagement Chair**



Johanna Dickie, Communication Chair



Nicole Zaino. Communication Chair



Alissa Acheson, Communication Chair



AJ Kruse, Community **Engagement Chair**

AMBASSADORS



Aisha Azmi



Anushri Ramanath



Jay Lin





John Pomeroy Katherine Zhao



Natalie VanDevanter



Samantha Mak Wendy Schnare

FACULTY



Kat Steele, PhD



PhD



Dianne Hendricks, Heather Feldner, DPT, PhD, PCS



Anat Caspi, PhD



Shawn Rundell, DPT



Jennifer Mankoff, PhD



George Zatloka

HUSKYADAPT FOUNDERS & FORMER LEADERS

2016-17 HUSKYADAPT LEADERSHIP



Molly Mollica,



Hendricks, PhD



Kat Steele, PhD



Heather Feldner, DPT, PhD, PCS



Anat Caspi, PhD



Shawn Rundell,

2016-17 WASHINGTON HAS ADAPTED TOYS (WHAT)



Novokhodko



Rouiia Wang



Philip Lee



Moritz Lange

2017-18 FOUNDING STUDENT EXECUTIVE BOARD







Molly Mollica Brandon Nguyen Jessica Zistatszis Karley Benoff







Kelly Xu



Nataliya Rokhmanova

2018-19 STUDENT EXECUTIVE BOARD



Molly Mollica



Alyssa Spomer Dylan Reinsdorf





Nataliya Rokhmanova



Olivia Rodriguez



Lien White



AJ Kruse

HOW TO GET INVOLVED



IF YOU'RE A UW STUDENT:

HuskyADAPT is always looking for new UW students to get involved! We welcome all majors and levels of experience. You could get involved by:

1) ATTENDING A TOY
ADAPTATION EVENT to adapt
toys for users with
disabilities. This is a onetime, two-hour commitment.



- 2) Joining a design team to solve an accessibility problem in our community. This is a year-long, five-hour/week commitment
- 3) **PARTICIPATING** in another HuskyADAPT event, such as a seminar or design showcase. These are typically one-time, one-hour commitments.
- 4) Following us on social MEDIA (Facebook, Instagram, and Twitter) via @HuskyADAPT
- 5) SIGNING UP TO RECEIVE THE
 HUSKYADAPT NEWSLETTER on the
 front page of our website:
 depts.washington.edu/adaptuw. All
 event advertisements and signups are
 in the HuskyADAPT newsletter, which
 is emailed every other week.



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HOW TO GET INVOLVED



IF YOU'RE A SEATTLE COMMUNITY MEMBER:

Thank you for your interest in HuskyADAPT! You could get involved by:

- 1) REQUESTING A FREE ADAPTED TOY for a family, clinic, school, or other organization. Please complete the adapted toy request form on our website > toy adaptation > request adapted toys and we will contact you about picking up your free adapted toys.
- 2) <u>SUGGESTING AN ACCESSIBILITY</u>
 <u>CHALLENGE FOR OUR DESIGN TEAMS</u> to tackle.
 please complete the form on our website >
 design > submit a challenge.



- 3) **HOSTING A TOY ADAPTATION EVENT** at your workplace or within another group. Please complete the form on our website > toy adaptation > host a workshop.
- 4) <u>Signing up to receive our newsletter and following us on social media.</u> All event advertisements and signups are in the HuskyADAPT Newsletter, which is emailed every other week. Sign up to receive the newsletter on the front page of our website: <u>depts.washington.edu/adaptuw</u>. You can find us on <u>Facebook</u>, <u>Instagram</u>, and <u>Twitter</u> (@HuskyADAPT).
- 5) **Donating** to HuskyADAPT. Most of our work is funded by generous donors. You can support us by:
 - a) donating at giving.uw.edu/huskyadapt
 - b) mailing a check to HuskyADAPT, please contact us to coordinate
 - c) making a donation via Venmo @HuskyADAPT

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OUR FUNDERS AND TANS SUPPORTERS



STUDENT

OFFICE

ACTIVITIES





Access **Engineering**

National Science Foundation (EEC-1444961)

OUR GENEROUS INDIVIDUAL DONORS, ESPECIALLY

TOM AND CAROLEE MATHERS

HELEN AND MILO MUTERSPAUGH

A SPECIAL TRIBUTE TO CAROLEE MATHERS

We are sad to share that HuskyADAPT lost one of our biggest supporters and cheerleaders. **Carolee Mathers**, a UW alumni and veteran teacher, passed away peacefully in December 2019. Her constant optimism, encouragement, and dedication to hands-on learning will continue to provide inspiration and support for HuskyADAPT. Carolee and her husband, Tom, helped to launch HuskyADAPT: mentoring design teams, attending design showcases, and providing constant support and enthusiasm. Thank you Carolee & Tom for all you've done for HuskyADAPT!



TO DONATE, VISIT GIVING.UW.EDU/HUSKYADAPT