

RAHAF ALHARBI

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EDUCATION

PhD	University of Michigan, School of Information Co-advised by Dr. Robin Brewer & Dr. Sarita Schoenebeck	May 2025
BS	UC San Diego, Mechanical Engineering GPA: 3.67 out of 4.00 Minored in Ethnic Studies	Mar. 2020

HONORS AND AWARDS

MAE Senior Design Runner Up 2 nd place award for our senior design project on building neonatal ECMO simulation	2020
KAUST Gifted Student Program Fully funded scholarship given to 1% students in Saudi Arabia for STEM excellence Estimated funding cost: \$300K USD.	2014
Thurgood Marshall Honors Program Successful entry requires a successful completion of one full-time quarter with a 3.8 GPA or better. Must maintain at least a 3.50 cumulative GPA to remain in program. I was inducted into the program after my first quarter at UC San Diego and remained eligible for all forthcoming quarters.	2015

PUBLICATIONS

Conference Papers (Peer-Reviewed)

[C1]. **Alharbi, R.**, Ng, A., Alharbi, R., & Hester, J. (2020, April). "I Am Not an Engineer": Understanding How Clinicians Design & Alter Assistive Technology. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-8). [Acceptance rate: 41.8%]

RESEARCH EXPERIENCE

Northwestern University , Evanston, IL	2019
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Summer Intern, Ka Moamoa Lab + Feinberg Medical School

- Planned optimal and safe PCB placement
- Designed 3D printed PCB fixture and battery connection
- Analyzed 3D printed fixture for stress/strain and tested failure scenarios
- Interviewed and coded 8 clinicians on makerspace experience (resulted in C1.)

King Abdullah University for Science & Technology , Thuwal, SA	2018
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Summer Intern, Clean Combustion Research Center

- Designed & conducted an experimental fluid mechanics project
- Analyzed fluid speed-photography data
- Categorized three types of laminar jet visualizations by varying density and velocity

SELECTED ENGINEERING PROJECTS

Neonatal ECMO Simulation (*Senior Design project*)

Jan 2019 – Mar 2020

Sponsored by Rady Children's Hospital

- Led participatory sessions with pediatric & cardiac surgeons to determine muscle materials
- Conducted material analysis on five proposed muscle designs
- Designed 3D printed enclosure for pseudo-created fat/tissue and vein/artery.
- Overall, our designed system is low cost (\$150), reusable, highly realistic, and easily manufacturable
- Awarded with MAE Senior Design Runner Up

PRESENTATIONS AND INVITED LECTURES

Paper Presentation, "I Am Not an Engineer": Understanding How Clinicians Design & Alter Assistive Technology. SIGAccess Riyadh, Jun. 2020.

Invited by Dr. Shiroq Al-Megren

Lecture, "Making PDFs Accessible." MAE 156B (Senior Design), UCSD. Apr. 2020.

Invited by Dr. Huihui Qi

PROFESSIONAL SERVICE

Peer-Reviewed Articles for:

- alt. chi 2020, *with* commentary appeared in Ymous, A., Spiel, K., Keyes, O., Williams, R. M., Good, J., Hornecker, E., & Bennett, C. L. (2020, April). "I am just terrified of my future"—Epistemic Violence in Disability Related Technology Research. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-16).

STUDENTS MENTORED

- Jasmine Duong (UROP), BSI'23

Sept 2020 – Present

LANGUAGES

English: Fluent (at the level of native speakers)

Arabic: Native speaker

SKILLS

Design: SOLIDWORKS, AutoCAD, EAGLE, Figma

Programming: Python, C/C++, MATLAB

Methods: qualitative & quantitative analysis, critical participatory design