#### Marwa AlAlawi - CV

Ph.D. Candidate
MIT Mechanical Engineering Department
MIT Computer Science and Artificial Intelligence Lab
32 Vassar Street, Cambridge, MA 02139 USA, Room 32-211
malalawi@mit.edu, malalawi.info

Additional Coursework in EECS and Japanese Studies

#### **Education**

#### Massachusetts Institute of Technology, Cambridge, MA 2023- Present Ph.D. in Mechanical Engineering MIT Mechanical Engineering Department MIT Computer Science and Artificial Intelligence Lab Advisor: Professor Stefanie Mueller Massachusetts Institute of Technology, Cambridge, MA 2021-2023 M.Sc. in Mechanical Engineering MIT Mechanical Engineering Department MIT Computer Science and Artificial Intelligence Lab Advisor: Professor Stefanie Mueller 2016 - 2020 Massachusetts Institute of Technology, Cambridge, MA B.Sc. in Mechanical Engineering MIT Mechanical Engineering Department

### **Publications**

Advisor: Dr. Brian Anthony

- [3] M. AlAlawi, N. Pacik-Nelson, J. Zhu, B. Greenspan, A. Doan, B, Wong, B.,
  Owen-Block, S. Mickens, W. Schoeman, M. Wessely, A.Danielescu, Stefanie Mueller.
  "MechSense: A Design and Fabrication Pipeline for Integrating Rotary Encoders into 3D Printed Mechanisms," In Proceedings of CHI 2023.
- [2] **M. AlAlawi** & B. Wong "LeviCircuits: Adhoc Electrical Circuit Prototyping using Ultrasound Levitation," UIST '22 Adjunct, SIC, October 2022

[1] M. AlAlawi ,"Design of a Virtual Environment for Physiological and Subjective Monitoring of User Presence in VR," B.Sc. thesis, Massachusetts Institute of Technology, May 2020

Selected Press Features

- [4] MISTI, A Launchpad Into MIT Students' Careers While Helping them Become Global Citizens, MIT Science & Technology Initiative, June 2023
- [3] **3D-Printed Revolving Devices can Sense How They are Moving,** MIT News, March 2023
- [2] In a First for GCC, MISTI Program to Be Launched in Bahrain, Bahrain News Agency, December 2022
- [1] Marwa AlAlawi, MechE, class of 2020 @ Gree Japan, MIT Japan Program, January 2022

## **Research Internships**

#### **Device Realization Group**, MIT Mechanical Engineering 2019-2020

Undergraduate Research Assistant

Advisor: Dr. Brian Anthony

#### Personal Robots Group, MIT Media Lab 2019

Undergraduate Research Assistant

Advisor: Professor Cynthia Breazeal

#### MIT Biomimetics Lab, MIT Mechanical Engineering 2017

Undergraduate Research Assistant

Advisor: Professor Sangbae Kim

# **Work Experience**

**REACT NEURO,** Cambridge, MA, USA 2020-2021

Virtual Reality Experience Designer, supervisor: Dr. Shaun Patel

GREE, Tokyo, Japan 2018

XR Intern, Supervisor: Ken Watanabe

# **Teaching Experience**

## **Teaching Assistantship**

[5]	2.00b	Toy Product Design, MIT	Spring 2022
[4]	2.009	Product Engineering Processes, MIT	Fall 2020
[3]	2.00b	Toy Product Design, MIT	Spring 2020
[2]	Bootcamp	MehtA+ Introduction to ML, MehtA+	Summer 2020
[1]	8.01	Mechanics, MIT	Fall 2017

## **Co-instructing**

[2] MISTI MIT International Science & Tech	<b>Initiative</b> , Bahrain	Winter 2023
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[1] MISTI MIT International Science & Tech Initiative, Jordan Winter 2020

## **Shop Training**

MIT Makerworkshop	<b>Student Machine Shop Mentor, MIT</b>	2019- Present
MIT Makerlodge	Student Machine Shop Mentor, MIT	2017-2018

## **Mentoring**

All students are co-advised by Professor Stefanie Mueller

#### **Undergraduate Research Assistants (UROP)**

[1] Wilhelm Schoeman	2022	[5] Brandon Wong	2022-2023
[2] Shanti Mickens	2022	[6] Adelene Chan	2023- Present
[3] Benjamin Owen-Block	2022	[7] Lisa Li-Liang	2023- Present
[4] Andrew Doan	2022		

#### **Invited Talks**

MIT, MISTI Tech Re-unions, MISTI: Supporting Global Changemakers	2023
3D Micro Printing, 3D-Printed Revolving Devices with Integrated Sensors	2023
MIT, International Women's Day, Networking & Building Community, hosted by MIT South Asia   India	by MIT Japan & 2023
American University of Bahrain, Novel Material Technologies	2023
MIT, MISTI Alumni Career Panel, Career, Culture and Language Barriers, hos Rivera	sted by Eduardo 2021
CleverPlay, The STEMCast, Mechanical Engineering Through HER Eyes, hosted AlKhalifa	ed by Latifa 2021

**The National Space Science Agency, NSSA Symposium,** Women in STEM: Investigating Space Through Virtual Reality, hosted by Latifa AlKhalifa 2021

**The Hill Editorial,** *Aspiration and Resilience: The New Space Age,* hosted by Steve Clemons and Embassy of the United Arab Emirates 2021

**MIT, MIT Nano Explorations**, *Design of a Virtual Environment for Physiological and Subjective Monitoring of User Presence in VR*, hosted by Dr. Brian Anthony 2020

**University of Bahrain, UOB Pep Talks**, *KanKan: Kanji to Katakana Physical OCR Translator*, hosted by The English Language Center (ELC) 2019

# Awards

MIT MISTI Ambassador Award, MIT	2023
Crown Prince International Scholarship, Bahrain	2014 - Present
Pi Tau Sigma (PTS) Mechanical Engineering Honor Society, MIT	

# Volunteering

Japanese Guest Liaison (Anime Boston), Boston, MA	2023
<b>Showa Japan Women's University College Connection Mentor, Boston, MA.</b>	2022-2023
Fellowship for Japanese High School Students, Boston, MA	2023
UIST Conference Student Volunteer, Bend Oregon	2022
Academic Paper Reviewing	2022- Current

# References

Professor Stefanie Mueller	Dr. Brian Anthony	<b>Professor David Wallace</b>
Associate Professor	Principal Research Scientist	Professor
EECS/ MechE	MechE	MechE
MIT	MIT	MIT
stefanie.mueller@mit.edu	banthony@mit.edu	drwallac@mit.edu
+1 (617) 715-5831	+1 (617) 715-2158	+1 (617) 253-2655