

# **Undergraduate Research as a Launchpad:** *Insights from a Post-doctoral Fellow*

**Dr. Michael West Jr., PhD – Provost’s Post-doctoral Fellow**

Haptics and Medical Robotics (HAMR) Lab

Laboratory for Computational Sensing and Robotics (LCSR)

Advisor Open House

August 13<sup>th</sup>, 2025



About Me

My Research

HAMR Lab

2024 Grads

Q & A

# About Me



Originally from Rancho Cucamonga, CA

College: Yale University

Graduate School: MIT

Postdoc: Johns Hopkins University

Faculty: Incoming Assistant Professor at Georgia Tech starting in August 2027



About Me

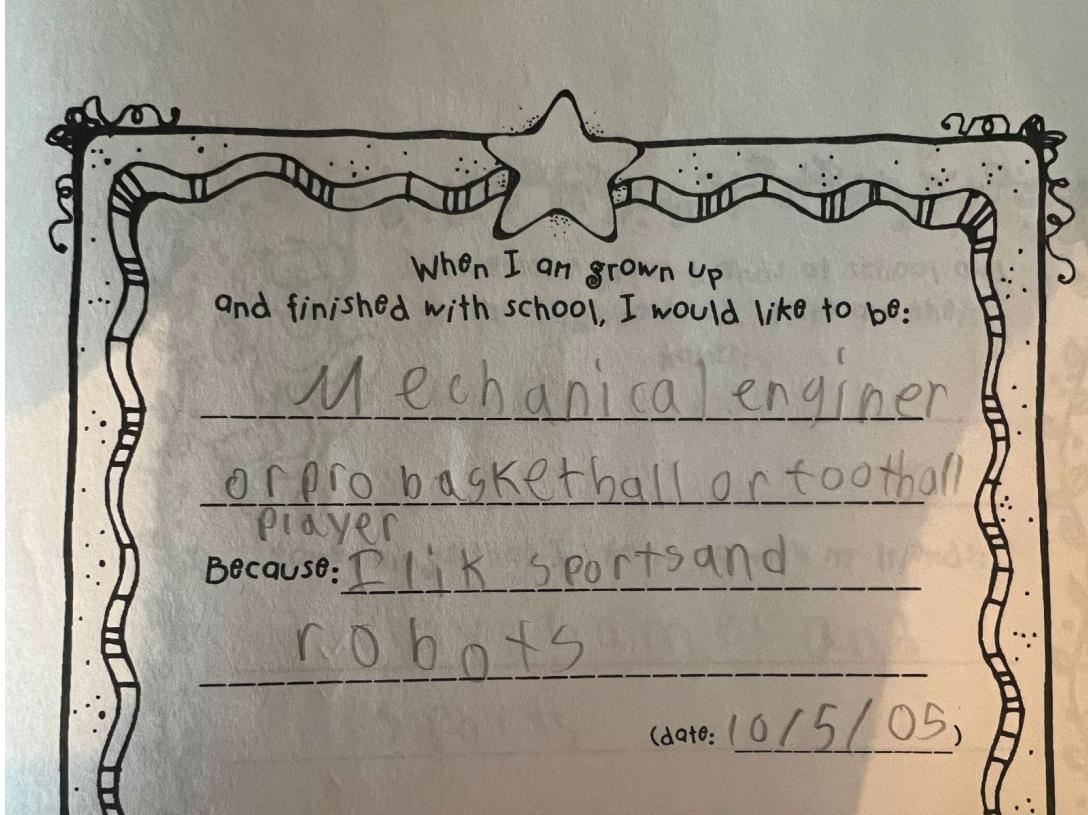
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HAMR Lab

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Q & A

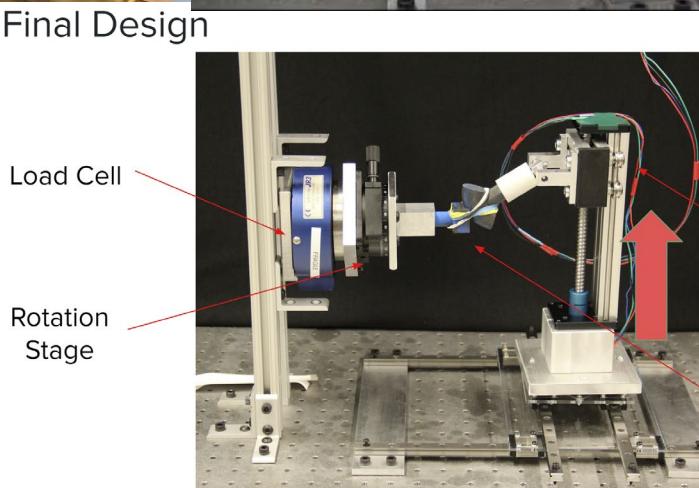
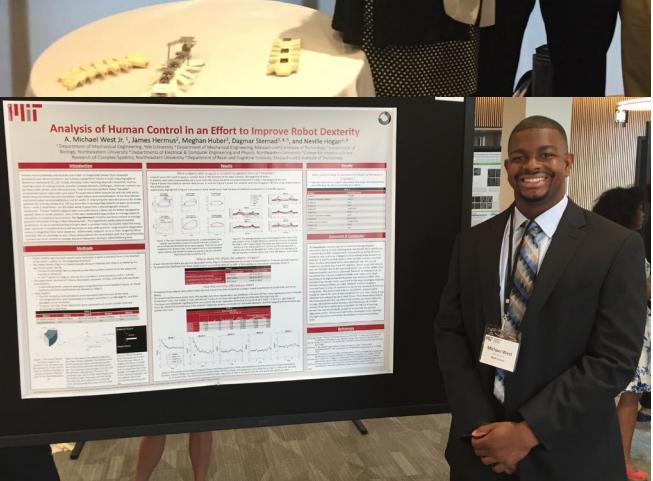
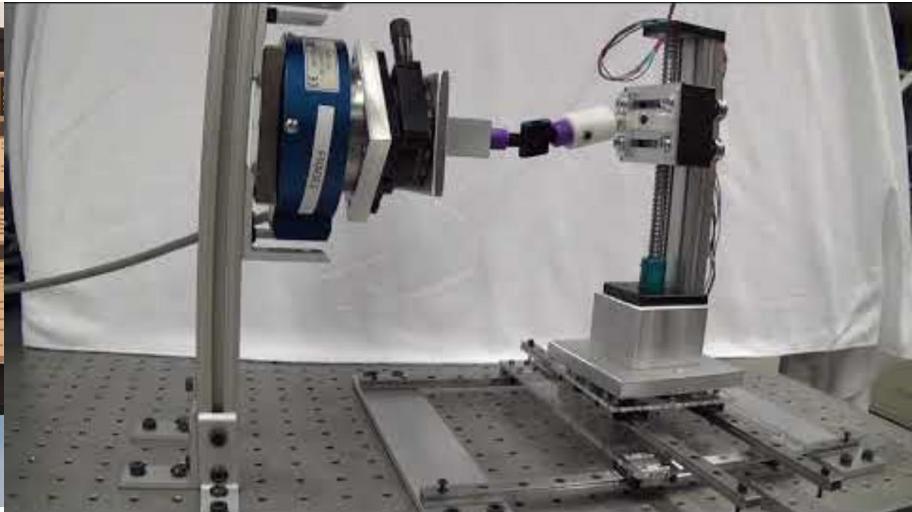
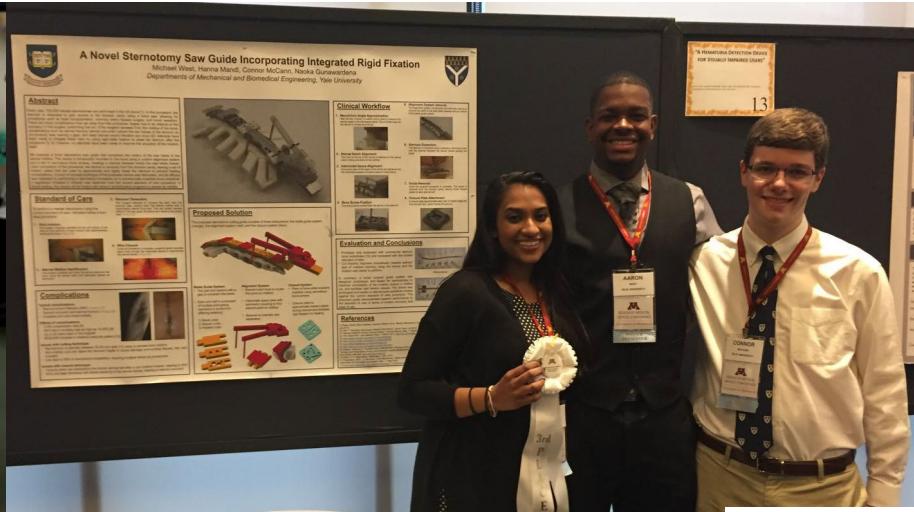
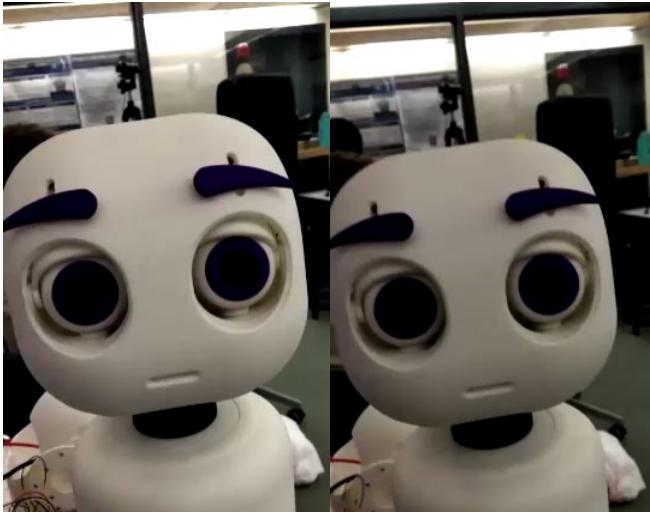
# How I became an Engineer



- Mom is a doctor, and I liked how she helped people.
- Dad is a software engineer.
- I thought robots were cool and I was good at math.



# How I got into Research



Load Cell  
Rotation Stage  
Translation Stage  
Joint Substitute



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My Research

HAMR Lab

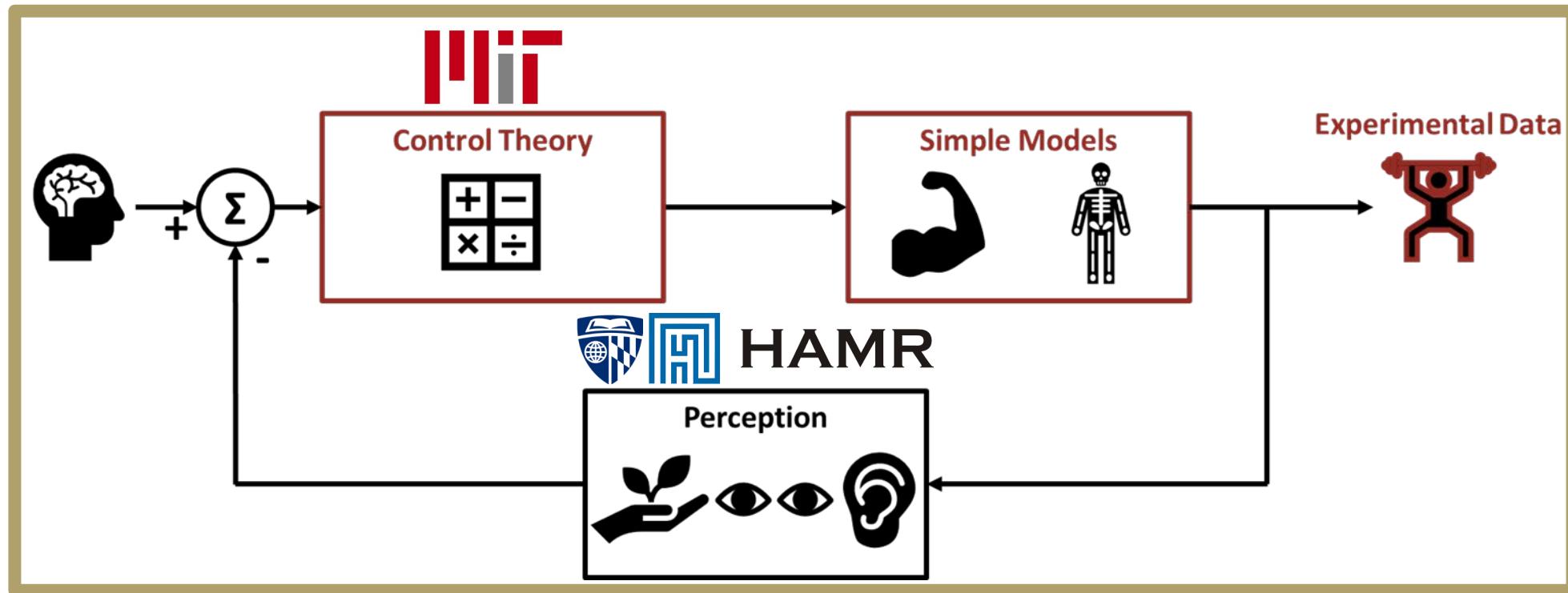
2024 Grads

Q & A

# My Research

**Goal:** Develop simple models and use control theory to better understand human motor control, perception, and learning.

**Applications:** Robotics, Rehabilitation, Skill Acquisition



# Haptics and Medical Robotics (HAMR) Laboratory

**Principal Investigator:** Jeremy Brown

**Goal:** Extend the current knowledge surrounding the human haptic perception.

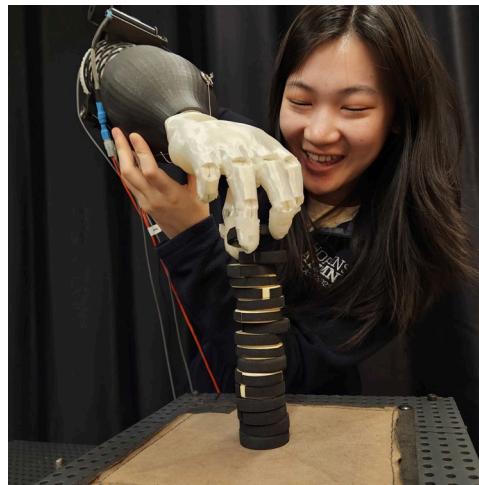
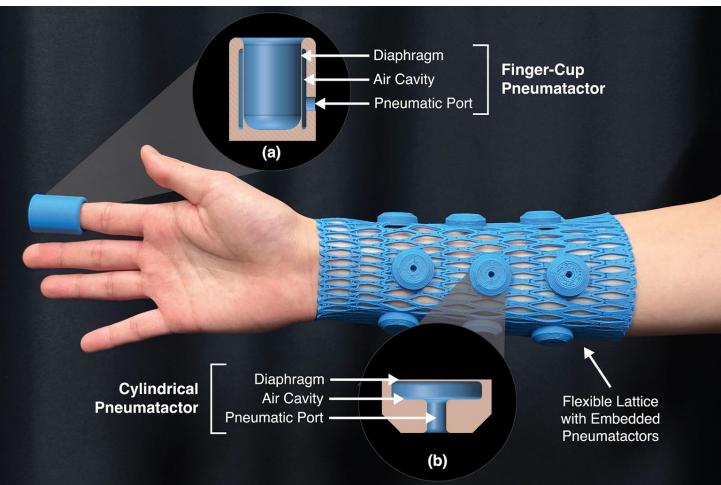
**Applications:** Minimally Invasive Surgical Robotics, Upper-Limb Prosthetic Devices, Rehab Robotics

**Current Members:** 1 Post-Doc, 6 PhDs, 1 Masters Student, 3 Undergrads, 2 High Schoolers

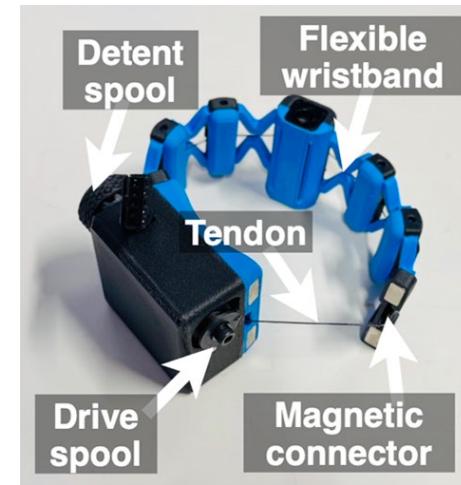
**Recent Alumni:** 3 PhDs in c/o 2024, 4 Masters Students in c/o 2024, 3 External Summer REU students



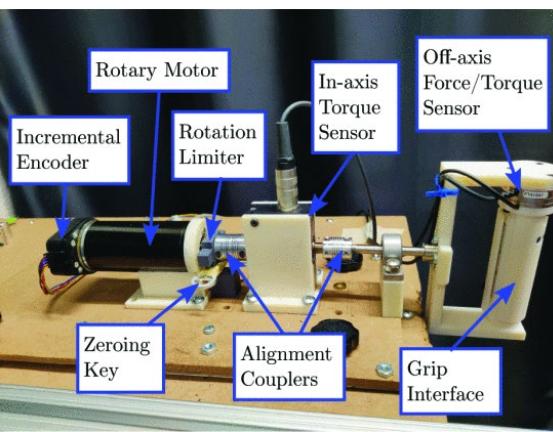
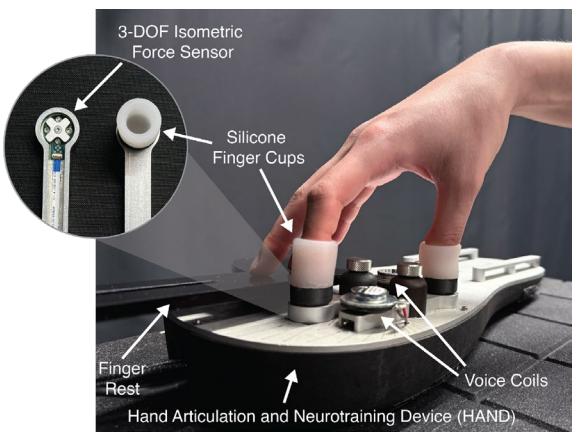
# Prosthetics



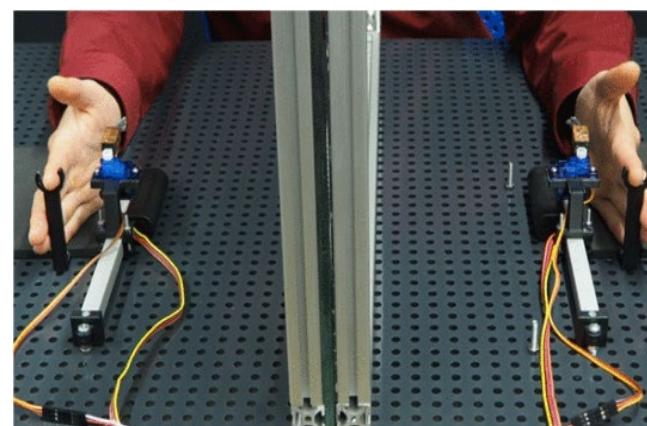
# Surgical Robotics



# Rehabilitation



# Perception



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My Research

HAMR Lab

2024 Grads

Q & A

# 2024 Graduates

## Master's Graduates

Anway Pimpalkar – Harvard PhD Candidate

Hannah Qu – Boston Scientific

Delphine Tan – Johnson & Johnson

Ariana Diaz – Future PhD Candidate

## PhD Graduates

Dr. Naveed Riaziat, PhD – Intuitive Surgical

Dr. Sergio Machaca, PhD – Sensetics

Dr. Alex Miller, PhD – Business Owner



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# Thank you! Questions?



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My Research

HAMR Lab

2024 Grads

Q & A