

## **A. Michael West Jr., PhD – Post-doctoral Fellow, Johns Hopkins University, Mechanical Engineering**

- phone: (909)-244-4164 • e-mail: [awest36@jh.edu](mailto:awest36@jh.edu) • [google scholar](#)
- web: <https://michaelwestjr.github.io/> • LinkedIn: <https://www.linkedin.com/in/michael-west-jr/>

### **RESEARCH INTERESTS**

My research, rooted in control theory, advances robotic technologies such as rehabilitation robotics, collaborative robots, prosthetics, and dexterous robots by investigating human motor control, learning, and perception. Combining expertise in controls, robotics, biomechanics, and neuroscience, I develop simple, descriptive motor control models that offer immediate and easily interpretable insight. Introducing novel analysis methods for human motor control and leveraging established approaches on new experimental paradigms, my work consistently uncovers fresh insights on human motor control, learning, and perception.

### **EDUCATION**

#### **Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts**

Ph.D., Mechanical Engineering, May 2024, GPA: 5.0/5.0

- Dissertation: [All Models are Wrong, Simple Models Provide Insight: A Study of Human Manipulation](#)
- Advisor: Neville Hogan
- Committee: Haruhiko Harry Asada, Alberto Rodriguez, and Madhusudhan Venkadesan

M.S., Mechanical Engineering, May 2020, GPA: 4.5/5.0

- Dissertation: Towards a non-invasive measurement of human motion, force, and impedance during a complex physical-interaction task: wire-harnessing.
- Advisor: Neville Hogan

#### **Yale University, New Haven, Connecticut**

B.S., Mechanical Engineering, May 2018, GPA: 3.5/4.0, Major GPA: 3.6/4.0

### **HONORS & AWARDS**

Johns Hopkins University Provost's Postdoctoral Fellowship Program (PPF) ( <b>\$97,475</b> )	2025
Johns Hopkins University Provost's Postdoctoral Fellowship Program (PPF) ( <b>\$100,880</b> )	2024
Office of Graduate Education Service Award, MIT Recognizing Individuals Supporting Equity Awards	2024
Shirley Anne Jackson Award, MIT Ebony Affair	2024
• Presented to the black graduate student who exemplifies the spirit of trailblazing leadership, academic excellence, and commitment to breaking barriers in their field of study.	
Inclusive Teaching Certificate, MIT Teaching + Learning Lab	2023
12 <sup>th</sup> Place (out of 300+ Submissions) Best Poster Competition, Rehab Week	2023
Accenture Fellowship ( <b>\$98,349</b> ), MIT	2023
MechE Research Exhibition (MERE), Honorable Mention Best Overall Performance ( <b>\$125</b> ), MIT	2023
BAMIT Research SLAM, 2 <sup>nd</sup> Place ( <b>\$500</b> ), Black Alumni of MIT (BAMIT)	2023
Takeda Fellowship ( <b>\$94,789</b> ), MIT	2022
Ben Gold Fellowship ( <b>\$90,932.76</b> ), MIT	2021
Ford Foundation Fellowship ( <b>\$81,000</b> ), Ford Foundation	2020
Teaching Practice Certificate, MIT Teaching + Learning Lab	2020
Black Graduate Student Association (BGSA) Excellence in Research Award, MIT Ebony Affair	2020
Subject Design Certificate, MIT Teaching + Learning Lab	2020
GEM University Associate Fellowship, MIT	2018 & 2020
Ford Foundation Fellowship Honorable Mention, Ford Foundation	2018
UCEM SLOAN Scholarship ( <b>\$40,000</b> ), MIT	2018
Office of Graduate Education (OGE) Diversity Fellowship ( <b>\$80,872</b> ), MIT	2018
Student Design Showcase, 3 <sup>rd</sup> Place, Design of Medical Devices Conference	2017

## RESEARCH EXPERIENCE

---

### **Johns Hopkins University, Haptics and Medical Robotics (HAMR) Laboratory**

**Advisor: Jeremy Brown**

#### **Provost's Postdoctoral Research Fellow**

2024 – Present

- Developing and evaluating rehabilitation strategies to mitigate sensorimotor impairments in wrist and hand function.
- Investigating the development of surgeon visual-haptic acuity during robot-assisted minimally invasive surgery, with implications for training and robotic system design.
- Examining how the nervous system coordinates, or dissociates, motor control and motor prediction during sensorimotor learning.
- Mentoring and advising PhD, master's, undergraduate, and high school students on research methodologies, experimental design, and career development.

### **Massachusetts Institute of Technology, Newman Laboratory for Biomechanics and Human Rehabilitation**

**Advisor: Neville Hogan**

#### **Graduate Student**

2018 – 2024

*My research uses analysis of kinematic data recorded during human behavioral studies to unveil latent aspects of human motor control, learning, and perception for applications in rehabilitation and robotics. An emphasis is placed on the development of simple, descriptive models.*

- Explored how kinematic analysis of the human hand can be used to estimate the complexity of a dexterous task.
- Collected & analyzed data on human hand manipulation of complex objects & tools.
- Investigated how humans estimate hidden mechanical properties of another's limbs simply by observing their motions. Developed a model of human motor perception.
- Conducted a human subject experiment to analyze how humans control force and motion during human-robot physical interaction.

### **Yale University, Biomechanics & Control Lab**

**Advisor: Madhusudhan Venkadesan**

#### **Undergraduate Research Assistant**

Fall 2017 – Spring 2018

- Designed & conducted an experiment to produce a geometric theory that models limb movement using joint surface features.

### **Yale University, Medical Device Design & Innovation**

**Advisor: Joseph Zinter**

#### **Design Engineering Student**

Fall 2016 – Fall 2017

- Designed & built a 125-part saw guide to improve sternotomies & decrease complications stemming from sternal non-union.

### **Yale University, Social Robotics Laboratory**

**Advisor: Brian Scassellati**

#### **Undergraduate Research Assistant**

Summer 2016

- Designed & built the interior & exterior components of a social robot's articulating face to improve infant-robot interaction.

## PEER-REVIEWED JOURNAL PUBLICATIONS

---

1. Huang, T., Huber, M., Brown, J. & **West, A. M.** (In Preparation). Perceiving latent dynamics: Innate and coachable visual estimation of limb damping. *PLOS Computational Biology*.
2. **West, A. M.**, Miller, A., Haith, A., & Brown, J. (In Preparation). Dissociation of Prediction and Control During Implicit Adaptation. *PLOS Computational Biology*.
3. Pimpalkar, A., **West, A. M.**, Rai, D., Xu, J., & Brown, J. (In Preparation). Evaluating Calibrated Multimodal Feedback in Augmenting Motor Rehabilitation. *Journal of NeuroEngineering and Rehabilitation (JNER)*.
4. Lachner, J., Tessari, F., **West, A. M.**, Nah, M.C., & Hogan, N. (Under Review). Divide et Impera: Learning impedance families for peg-in-hole assembly. *IEEE Transactions on Robotics (T-RO)*.
5. Tessari, F., **West, A. M.** & Hogan, N. (2025). [Explaining human motor coordination via the synergy expansion hypothesis](#). *The Proceedings of the National Academy of Sciences (PNAS)*. [Video Summary]
6. **West, A. M.** & Hogan, N. (2025). [Kinematic hand synergies differ between reach-and-grasp and functional object manipulation](#). *Journal of Neurophysiology*.
7. **West, A. M.**, Tessari, F., Wang, M., & Hogan, N. (2025) [The Study of Dexterous Hand Manipulation: A Synergy-Based Complexity Index](#). *IEEE Transactions on Medical Robotics and Bionics*. [Video Summary]
8. **West, A. M.**, Huber, M.E., & Hogan, N. (2022). [Role of Path Information in Visual Perception of Joint Stiffness](#). *PLOS Computational Biology*. [Video Summary]
9. **West, A. M.**, Hermus, J., Huber, M., Maurice, P., Sternad, D., & Hogan, N. (2022). [Dynamic Primitives Limit Human Force Regulation during Motion](#). *IEEE Robotics and Automation Letters (RA-L)*. [Video Summary]

## PEER-REVIEWED CONFERENCE PUBLICATIONS

---

1. **West Jr., A. M.**, Kasmican, B., Pimpalkar, A., Xu, J., & Brown, J. (Under Review). Cross-Modal Matching Is Not Bidirectional: Implications for Human Multisensory Feedback. *IEEE International Conference on Biomedical Robotics and Biomechatronics (BioRob)*.
2. **West, A. M.**, Pimpalkar, A., Xu, J., & Brown, J. (2025). SenseMatch: Smartphone-Based Cross-Modal Matching for Accessible Perceptual Assessments. *IEEE EMBS Conference on Neural Engineering (NER)*.
3. Tessari, F., **West, A. M.** & Hogan, N. (2025). [A Geometric Approach for the Comparison of Kinematic Synergy Postures](#). *IEEE International Conference on Rehabilitation Robotics (ICORR)*.
4. Pimpalkar, A., **West, A. M.**, Xu, J., & Brown, J. (2025). [Optimizing Cross-Modal Matching for Multimodal Motor Rehabilitation](#). *IEEE International Conference on Rehabilitation Robotics (ICORR)*.
  - a. **Best Student Paper Award Finalist**
5. **West, A. M.**, Tessari, F., & Hogan, N. (2023). [The Study of Complex Manipulation via Kinematic Hand Synergies: The Effects of Data Pre-Processing](#). *IEEE International Conference on Rehabilitation Robotics (ICORR)*. [Video Summary]

## SHORT PEER-REVIEWED CONFERENCE ARTICLES & ABSTRACTS

---

1. **West, A. M.**, Pimpalkar, A., Xu, J., & Brown, J. (2025). SenseMatch: Smartphone-Based Cross-Modal Matching for Accessible Perceptual Assessments. Poster presented at the *IEEE EMBS Conference on Neural Engineering (NER)*.
2. Berthet, M., **West Jr, A. M.**, Branscheidt, M., & Awai, C. E. (2025). [VAF-CI: Quantifying low-dimensional global movement complexity during a novel lower limb motor learning task](#) *Gait & Posture*
3. **West, A. M.**, Huber, M.E., & Hogan, N. (2025). Role of Path Information in Visual Perception of Joint Stiffness. PowerPoint presented at the *Summer School on Neurorehabilitation (SSNR)*, Vigo, Spain.
4. **West, A. M.**, Tessari, F., Wang, M., & Hogan, N. (2025) The Study of Dexterous Hand Manipulation: A Synergy-Based Complexity Index. Poster presented at the *Summer School on Neurorehabilitation (SSNR)*, Vigo, Spain.
5. **West, A. M.**, Tessari, F., Wang, M., & Hogan, N. (2024) The Study of Dexterous Hand Manipulation: A Synergy-Based Complexity Index. PowerPoint presented at *IEEE International Conference on Biomedical Robotics and Biomechatronics (BioRob)*, Heidelberg, Germany.

6. **West, A. M.**, Tessari, F. & Hogan, N. (2023). The Study of Complex Manipulation via Kinematic Hand Synergies: The Effects of Data Pre-Processing. PowerPoint & poster presented at *Rehab Week*, Singapore. **12<sup>th</sup> place (out of 300+ submissions) best poster award.**
7. **West, A. M.**, & Hogan, N. (2023). Kinematic Hand Synergies Differ during Tool-Use and Object Manipulation. Poster presented at the 2023 *Society for Neural Control of Movement (NCM) Conference*, Victoria, BC, Canada.
8. **West, A. M.**, Hermus, J., Huber, M., Maurice, P., Sternad, D., & Hogan, N. (2022). Dynamic Primitives Limit Human Force Regulation during Motion. PowerPoint & poster presented at the 2022 *International Conference of Robotics and Automation (ICRA)*, Philadelphia, PA, USA.
9. **West, A. M.**, Hermus, J., Huber, M., Maurice, P., Sternad, D., & Hogan, N. (2022). Dynamic Primitives Limit Human Force Regulation during Motion. Poster presented at the 2022 *MIT Sports Summit*, Cambridge, MA, USA.
10. **West, A. M.**, Huber, M.E., Hermus, J., Maurice, P., Sternad, D., & Hogan, N. (2021). Humans Do Not Directly Control Force During Physical Interaction. Poster presented at the 2021 *Society for the Neural Control of Movement Conference (NCM)*, Virtual.
11. **West, A. M.**, Huber, M.E., & Hogan, N. (2020). Role of Path Information in Visual Perception of Joint Stiffness. PowerPoint presented at the 2020 *Neuromatch Conference*, Virtual.
12. **West, A. M.**, Huber, M.E., Hermus, J. & Hogan, N. (2020). Humans Do Not Directly Control Force During Physical Interaction. PowerPoint presented at the 2020 *Conference of Ford Fellows*, Virtual.
13. **West, A. M.**, & Hogan, N. (2020). An Analysis of Kinematic Hand Synergies During Wire-Harness Installation. PowerPoint presented at the 2020 *International Conference of Robotics and Automation (ICRA)*, Virtual.
14. Huber, M.E., **West, A. M.**, Folinus, C., & Hogan, N. (2019). Visual Perception of Joint Stiffness from Multi-Joint Limb Motion. Poster presented at the 2019 *Annual Conference of the Society for Neuroscience (SfN)*, Chicago, IL, USA.
15. **West, A. M.**, Mandl, H., McCann, C., & Gunawardena, N. (2017). A Novel Sternotomy Saw Guide Incorporating Integrated Rigid Fixation. Poster presented at the 2017 *Design of Medical Devices Conference*, Minneapolis, MN, USA.

## INVITED TALKS

---

1. **["How We See, How We Feel: Exploring Human Perception"](#)** Georgia Tech's Online Master of Science in Computer Science (OMSCS) program, September 18<sup>th</sup>, 2025
2. **["Undergraduate Research as a Launchpad: Insights from a Post-doctoral Fellow"](#)** Advisor Open House, Johns Hopkins University, August 13, 2025
3. **["Michael West's Journey to Dr. Michael West, PhD"](#)** Promoting Research Opportunities in Engineering Labs (PROPEL), Johns Hopkins University, June 25, 2025
4. **["Navigating the Faculty Interview Process: Advice for Candidates"](#)** Postdoctoral Research Association, Johns Hopkins University, February 18, 2025
5. **["All Models are Wrong, Simple Models are Insightful: A Study of Human Manipulation"](#)** Department of Mechanical Engineering, Johns Hopkins University, September 19, 2024
6. **["The Newman Laboratory for Biomechanics, Robotics and Human Rehabilitation: A journey through motor coordination, manipulation and physical interaction"](#)** Munich Institute of Robotics and Machine Intelligence (MIRMI), Technical University of Munich, June 17, 2024
7. **["All Models are Wrong, Simple Models are Insightful: A Study of Human Manipulation"](#)** Department of Mechanical Engineering, Massachusetts Institute of Technology, April 11, 2024
8. **["All Models are Wrong, Simple Models are Insightful: A Study of Human Manipulation"](#)** Department of Robotics, University of Michigan, March 28, 2024
9. **["All Models are Wrong, Simple Models are Insightful: A Study of Human Manipulation"](#)** Department of Electrical Engineering and Computer Sciences, University of California Berkeley, February 27, 2024

10. "All Models are Wrong, Simple Models are Insightful: A Study of Human Manipulation" George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, February 14, 2024
11. "Exploring Human Performance: The Importance of Studying our Limitations" Collaborative Haptics and Robotics in Medicine Lab (Allison Okamura), Stanford University, May 10, 2023
12. "[Exploring Human Performance: The Importance of Studying our Limitations](#)" Neuromuscular Biomechanics Lab (Scott Delp), Stanford University, May 10, 2023
13. "Understanding Human Neuromotor Control: All Models are Wrong, Simple Models are Useful" Neurobionics Engineering Club, Camplus College, May 4, 2023
14. "[Mechanical Impedance: A Necessity in Both Human Motor Action and Human Motor Perception](#)" Control Conclave, Indian Institute of Technology Delhi, January 6, 2023
15. "[Mechanical Impedance: A Key Component in Both Human Motor Action and Motor Perception](#)" Future Leaders in Mechanical and Aerospace Engineering: Celebrating Diversity and Innovation, March 10, 2021

## TEACHING EXPERIENCE

---

### **Johns Hopkins University, 530.343 Design and Analysis of Dynamical Systems**

#### **Co-Instructor with Prof. Louis Whitcomb**

Spring 2025

- Independently developed and delivered a series of structured lectures as part of a required undergraduate course, creating concept-driven lessons that complemented the broader instructional plan.
- Collaborated with the lead instructor to shape the course's direction and learning outcomes; co-developed assessments including quizzes, problem sets, and exams aligned with course objectives.
- Taught core topics such as modeling and analysis of damped and undamped, forced and free vibrations in single and multi-degree-of-freedom linear dynamical systems, as well as introductory concepts in system stability and control.

### **Massachusetts Institute of Technology, Teaching + Learning Lab**

#### **Inclusive Teaching Track**

Fall 2023

- Investigated research on "belonging" in academic settings & developed actionable strategies to cultivate a sense of belonging in teaching contexts.
- Devised discipline specific teaching practices that consistently engage in critical reflection to assess & enhance inclusivity within my classroom.

### **Massachusetts Institute of Technology, 2.183J/4 Biomechanics & Neural Control of Movement**

#### **Teaching Assistant to Professor Neville Hogan**

Spring 2021

- Assisted students in understanding homework & lecture material via weekly office hours.
- Helped organize the course & develop lessons based on the courses teaching topics.
- Orchestrated a course designed for upper-level undergraduate students and graduate students. It was comprised of 7 undergraduate & 15 graduate students.
- Presented students with a quantitative description of how biomechanical & neural factors interact in human sensory-motor behavior. Topics included a review of relevant neural, muscular & skeletal physiology, neural feedback & "equilibrium-point" theories, co-contraction strategies, impedance control, kinematic redundancy, optimization, intermittency, contact tasks & tool-use.

**Massachusetts Institute of Technology, 2.151 Advanced System Dynamics & Control****Teaching Assistant to Professor Neville Hogan**

Fall 2020

- Independently led students in weekly problem-solving based lectures.
- Helped organize the course & develop lessons based on the courses teaching topics.
- Support a course designed for graduate students. It was comprised of 30 graduate students.
- Educated topics including analytical descriptions of state-determined dynamic physical systems, time & frequency domain representations, system characteristics, & modification of system characteristics using feedback.

**Massachusetts Institute of Technology, Teaching + Learning Lab****Teaching Practice Certificate Program**

Summer 2020

- Discovered several evidence-based teaching strategies that help students stay cognitively active & enable them to practice the material & immediately test their knowledge.
- Practiced giving a lecture that incorporated active learning techniques on a topic involving computer programming.

**Massachusetts Institute of Technology, Teaching + Learning Lab****Subject Design Certificate Program**

Summer 2020

- Practiced defining a lecture's scope, goals, & objectives, & how to effectively assess student progress & give useful feedback.
- Developed an ability to cultivate a classroom that values a diverse set of thoughts, perspectives, & experiences by acknowledging my own experiences & biases.

**SUPERVISION OF HIGH SCHOOL MENTEES**

Naomi M., Garrison Forest School

Spring 2025

**SUPERVISION OF UNDERGRADUATE MENTEES**

Taliyah Huang, Computer Science and Biomedical Engineering, JHU

Spring 2025 – Present

*Publications:*

- **Huang, T.**, Huber, M., Brown, J. & West, A. M. (In Preparation). Perceiving latent dynamics: Innate and coachable visual estimation of limb damping. *PLOS Computational Biology*.

Caly Ferguson, Mechanical Engineering, UMBC

Summer 2025

Jason Childs, Electrical Engineering, Howard University

Summer 2025

Nicole Attram, Mechanical Engineering, UMBC

Summer 2023 – Fall 2024

*Next Position:* PhD Candidate, Northwestern University

Shreya Gupta, Mechanical Engineering, MIT

Summer 2020 – Fall 2020

**SUPERVISION OF GRADUATE MENTEES**

Aaliyah Mazzeo, Ph.D., Biomedical Engineering, JHU

Summer 2025 – Present

Berk Kasmican, M.S., Mechanical Engineering, JHU

Summer 2025 – Present

*Publications:*

- West Jr., A. M., **Kasmican, B.**, Pimpalkar, A., Xu, J., & Brown, J. (Under Review). Cross-Modal Matching Is Not Bidirectional: Implications for Human Multisensory Feedback. *IEEE International Conference on Biomedical Robotics and Biomechatronics (BioRob)*.

Anway Pimpalkar, M.S., Biomedical Engineering, JHU

Fall 2024 – Summer 2025

Next Position: PhD Candidate, Harvard University

Publications:

- **Pimpalkar, A.**, West, A. M., Rai, D., Xu, J., & Brown, J. (In Preparation). Evaluating Calibrated Multimodal Feedback in Augmenting Motor Rehabilitation. *Journal of NeuroEngineering and Rehabilitation (JNER)*.
- West Jr., A. M., Kasmican, B., **Pimpalkar, A.**, Xu, J., & Brown, J. (Under Review). Cross-Modal Matching Is Not Bidirectional: Implications for Human Multisensory Feedback. *IEEE International Conference on Biomedical Robotics and Biomechatronics (BioRob)*.
- West, A. M., **Pimpalkar, A.**, Xu, J., & Brown, J. (2025). SenseMatch: Smartphone-Based Cross-Modal Matching for Accessible Perceptual Assessments. *IEEE EMBS Conference on Neural Engineering (NER)*.
- **Pimpalkar, A.**, West, A. M., Xu, J., & Brown, J. (2025). Optimizing Cross-Modal Matching for Multimodal Motor Rehabilitation. *IEEE International Conference on Rehabilitation Robotics (ICORR)*.

- **Best Student Paper Award Finalist**

Margaret Wang, M.Eng., Electrical Engineering & Computer Science, MIT

Fall 2022 – Spring 2023

Next Position: Roboticist, Boston Dynamics AI Institute

Publications:

- **Wang, M. X.** (2023). *Non-invasive vision-based measurement of hand kinematics and interaction* (M. Eng, MIT).
- West, A. M., Tessari, F., **Wang, M.**, & Hogan, N. (2025) The Study of Dexterous Hand Manipulation: A Synergy-Based Complexity Index. *IEEE Transactions on Medical Robotics and Bionics*.

## WORK EXPERIENCE

---

**Medtronic, North Haven**

Summer 2018

**Robotic Design Intern**

- Designed & built the first prototype of an articulating endoscope to interface with a surgical robot, using Creo Parametric 3.0.
- Implemented the endoscopes controller model using Simuscape 2017.

**Yale University, Yale Student Technology Collaborative (STC)**

2017 – 2018

**Computer Lab Technician**

- Repaired hardware & software issues of on-campus lab computers.

**Yale University, Center for Engineering Innovation & Design (CEID)**

2017 – 2018

**Design Aide**

- Provided theoretical & technical expertise to students seeking help on design projects in the CEID.

## COMMUNITY SERVICE & LEADERSHIP

---

**Johns Hopkins University, Mechanical Engineering Department Belonging Committee**

Spring 2025 – Present

**Post-Doctoral Representative**

- Contributes to initiatives that support student well-being, promotes inclusive recruitment, and informs departmental strategies to foster an equitable academic environment.

**Massachusetts Institute of Technology, New Vassar Dormitory****Graduate Resident Advisor**

Fall 2020 – Spring 2024

- Fostered a supportive, safe, & positive living environment for 38 students through events built upon shared community standards.
- Completed numerous training courses on student support, facilitating group dynamics, fostering interpersonal relationships, and mandatory reporting as a responsible employee.

**Massachusetts Institute of Technology, Black Graduate Student Association (BGSA)****Treasurer**

Spring 2021 – Spring 2022

- Allocated & managed funds (~\$21,000) to hold community service & social events for MIT's Black graduate students.

**Massachusetts Institute of Technology, MIT Summer Research Program (MSRP)****Pod Leader**

Summer 2019 &amp; Summer 2021

- Organized meetings & events to foster a positive climate for undergraduate minority students conducting research at MIT.
- **16 of the 19 students I mentored have enrolled in top STEM graduate programs including MIT, Stanford, UC Berkeley, Georgia Tech, UCLA, & Purdue.**

**Massachusetts Institute of Technology, Academy of Courageous Minority Engineers (ACME)****Treasurer**

Spring 2019 – Spring 2022

- Allocated & managed funds (~\$8,000) for a group of minority engineers who met weekly to discuss career goals & hold each other accountable in achieving those goals.

**Massachusetts Institute of Technology, Men's Rugby Football Club****President & Captain**

Spring 2019 – Spring 2024

- Oversaw team operations, organized competitive events, & fostered a cohesive team environment, resulting in elevated team performance & strengthened camaraderie.
- Initiated & led comprehensive post-COVID revitalization efforts to reignite team participation & boost morale, resulting in a significant increase in club membership & active participation.

**Yale University Admissions Office****STEM Outreach Ambassador**

Spring 2017 – Spring 2018

- Mentored high school students, who had expressed interest in pursuing STEM fields, in making an informed college decision.

**National Society of Black Engineers (NSBE) Yale University Chapter****Vice President**

Spring 2016 – Spring 2017

- **Founded a tutoring service at New Haven Academy High School.**
- Facilitated chapter meetings & increased comradery through encouraging Black students to continue pursuing STEM fields.
- Assisted in managing organization finances in efforts to sponsor members to attend the national conferences.

**Yale University Football****Defensive End & Linebacker**

Fall 2014 – Summer 2016

- Devoted over 30 hours per week to film study, practice sessions, rigorous strength & conditioning, & encouraging teammates to foster team morale.

## PROFESSIONAL SERVICE

---

### Journal Paper Reviews

- IEEE Robotics and Automation Letters (RA-L)
- IEEE Transactions on Neural Systems and Rehabilitation Engineering (TNSRE)
- IEEE Transactions on Biomedical Engineering (TBME)
- PLOS Computational Biology
- Qeios

### Conference Paper Reviews

- IEEE International Conference on Robotics and Automation (ICRA)
- IEEE International Conference for Rehabilitation Robotics (ICORR)
- IEEE International Conference on Intelligent Robots and Systems (IROS)

### Workshops Organized

- “Is open-source hardware the road forward for Upper Extremity Rehabilitation and Neuroscience?”, *2025 IEEE International Consortium for Rehabilitation Robotics (ICORR)*

## PROFESSIONAL DEVELOPMENT

---

Academics with Diversity Education and Mentorship in Engineering, University of Akron	July 2025
The Summer School on Neurorehabilitation (SSNR), Vigo, Spain	June 2025
The Inaugural Raynor Cerebellum Project Postdoc Summit, Scottsdale, AZ	November 2024
The Institute on Teaching and Mentoring, New Orleans, LA	October 2024
BE GREAT Retreat (Hosted by Dr. Brooke Coley), Atlanta, GA	March 2024
National Society of Black Engineers (NSBE) Annual Convention, Atlanta, GA	March 2024
The Institute on Teaching and Mentoring, Tampa, FL	October 2023
Trail Blazers in Engineering, Purdue University	July 2023
Postdoctoral Recruitment Initiative in Sciences and Medicine (PRISM), Stanford University	May 2023
Focus Fellows Program, Georgia Institute of Technology	January 2023
The Institute on Teaching and Mentoring, Atlanta, GA	October 2022
NextProf Nexus Future Faculty Workshop, University of California, Berkeley	September 2022
The Institute on Teaching and Mentoring, Atlanta, GA	October 2019
National Society of Black Engineers (NSBE) Annual Convention, Pittsburgh, PA	March 2018
National Society of Black Engineers (NSBE) Annual Convention, Kansas City, MO	March 2017
National Society of Black Engineers (NSBE) Annual Convention, Boston, MA	March 2016

## IN THE NEWS

---

<a href="#">Q&amp;A with Provost's Postdoctoral Fellow Michael West Jr.</a>	Johns Hopkins MechE	December 2024
<a href="#">Johns Hopkins welcomes new cohort of Provost's Postdoctoral Fellows</a>	The Hub at Johns Hopkins	September 2024
<a href="#">MechE researchers pioneer human motor control theory through global collaboration at TU Munich</a>		
MIT MechE		July 2024
<a href="#">A. Michael West: Advancing human-robot interactions in health care</a>	MIT News	September 2023

## TECHNICAL SKILLS

---

- Hardware: rapid prototyping using 3D printers, laser cutters, & machine shop tools (mill & lathe).
- Software: CAD (Solidworks, Creo Parametric), Programming (C, C++, Matlab, Python, Arduino, Machine Learning), MuJoCo, Drake, Visual Studio, Microsoft Office.

## REFERENCES

---

Professor Jeremy Brown  
Department of Mechanical Engineering  
Johns Hopkins University  
119 Hackerman Hall  
3101 Wyman Park Dr,  
Baltimore, MD 21218  
410-516-6609  
[jdelainebrown@jhu.edu](mailto:jdelainebrown@jhu.edu)

Professor Meghan Huber  
Room 207C  
Department of Mechanical and Industrial  
Engineering  
University of Massachusetts, Amherst  
160 Governors Drive  
Amherst, MA 01003  
413-545-7656  
[mehuber@umass.edu](mailto:mehuber@umass.edu)

Professor Neville Hogan  
Room 3-146  
Department of Mechanical Engineering  
Massachusetts Institute of Technology  
77 Massachusetts Avenue  
Cambridge, Massachusetts 02139  
617-253-2277  
[neville@mit.edu](mailto:neville@mit.edu)

Professor Asegun Henry  
Room 3-164  
Department of Mechanical Engineering  
Massachusetts Institute of Technology  
77 Massachusetts Avenue  
Cambridge, Massachusetts 02139  
617-258-5808  
[ase@mit.edu](mailto:ase@mit.edu)