

Jordan M. Witt

(301) 928-2591 | jmwitt@udel.edu

RESEARCH INTERESTS

Human movement biomechanics, rehabilitation biomechanics, assistive technology, prosthetics, orthotics, wheelchairs, spinal cord injuries.

EDUCATION

Bachelor of Science in Biomedical Engineering

Messiah University, Mechanicsburg PA

August 2021 – May 2023

- Cum Laude •
- GPA: 3.44

Doctor of Philosophy in Biomedical Engineering

University of Delaware, Newark DE

August 2024 - Present

RESEARCH EXPERIENCE

University of Delaware | Newark, DE

October 2025 – Present

Human Oriented Robotics and Controls Lab, Dr. Panagiotis Artemiadis (Advisor)

- Conducting human-subjects testing on a novel variable-stiffness treadmill.
- Focusing on the intersection of reinforcement learning and musculoskeletal modeling.
- Research requires knowledge of biomechanics, robotic control, and artificial intelligence.

University of Delaware | Newark, DE

January 2025 – October 2025

Delaware Limb Loss Studies Laboratory, Dr. Megan Sions (Advisor)

- Assisted with data processing, interpretation, and dissemination.
- Assisted with data collections and limb loss clinics involving protected populations.
- Presented work on spatiotemporal parameters in limb loss with low back pain at the American Prosthetics and Orthotics 2025 National Assembly.

Messiah University | Mechanicsburg, PA

August 2021 – May 2023

Messiah University Collaboratory for Strategic Partnerships and Applied Research Student

Project Manager, Dr. Ryan Farris (Advisor)

- Student project manager of the Stance-Control Orthotic project.
- Supervised the entire project and delegated tasks to meet project goals.
- Composed fundamental project management forms and reports.
- Communicated with project partners and professional panelists.
- Fabricated knee orthoses in-house and created a training manual for in-house brace fabrication.

University of Pittsburgh | Pittsburgh, PA

May 2022 – July 2022

Research Experience for Undergraduates, Dr. Alicia Koontz (Advisor)

- Created novel Machine Learning (ML) models for a clinical research application.
- Facilitated data collection with peer subjects.
- Succeeded in creating ten ML models utilizing MATLAB's classification learner.
- Composed a conference paper and poster summarizing work.
- Elevator pitch competition winner.

TEACHING EXPERIENCE

First-Year Writing Tutor

August 2021 – December 2022

- Worked one-on-one with 6-7 students with an identified need to construct their major papers for their first-year seminar class.

Teaching Assistant

January 2025 - Present

- Bioengineering Mechanics II (Spring)
 - Held office hours, graded homework, reworked homework problems and solutions
- Bioengineering Mechanics I (Fall)
 - Hold office hours, grade homework and exams, provide in-class assistance

PROFESSIONAL/WORK EXPERIENCE

**Technical Solutions Engineer-OpTime
Epic Systems, Verona WI**

July 2023 – July 2024

- Provided technical assistance to hospital analysts working with Epic M-code software.
- Identified and solved issues experienced by end users.
- Provided command center and floor support during customer go-lives.
- Engaged in internal development projects.

Dining Services

August 2019 - May 2023

Messiah University, Mechanicsburg PA

- Engaged in multiple roles in monetary transactions, food, and specialty drink preparation, kitchen cleaning, and sanitizing.

LEADERSHIP EXPERIENCE

Messiah University | Mechanicsburg, PA

August 2022 - May 2023

Collaboratory Student Board Member

- Participated in event planning, setup, and oversight.
- Contributed to policy formation as a student representative.

Messiah University | Mechanicsburg, PA

March 2022 - May 2023

Newman Club Vice President

- Presided over meetings and events in the absence of the President.
- Managed the club's social media accounts.
- Completed event approval forms, reservations, and other necessary documentation for club operation.

Messiah University | Mechanicsburg, PA

August 2020 - August 2021

Orientation Leader

- Led a group of first-year students to facilitate group bonding during Welcome Week.
- Assisted in planning Welcome Week themes and activities.
- Physically aided students during the move-in process.

VOLUNTEER WORK

Messiah University Collaboratory for Strategic Partnerships and Applied Research
Mechanicsburg, PA

August 2019 - May 2021

- Volunteered with the Cunningham Clubfoot Brace Team, which seeks to perform data validation of the efficacy of a unilateral clubfoot brace.
- Volunteer work involved research, design, and fabrication to create a biomechanical model of a 6month-old infant leg for testing purposes.

Ability Ottobock Care
Mechanicsburg, PA

August 2022 - December 2022

- Assisted with orthotic fitting and adjustment, socket fitting, prosthetic integration, and alignment.

SKILLS

General: Project management, written and oral communication, multitasking, problem solving, technical and scientific writing, time management, public speaking, independent and collaborative work.

Laboratory: Cell Culture, Fluorescent Microscopy, PCR, Histology.

Biomechanics: Gait analysis, simple orthotic alignment and assembly, data collection, processing, and statistical interpretation.

Instrumentation: EMG, MRI, IMU, Motion Capture, 6-axis Robotic Control.

Coding Languages: Matlab, Arduino, Python, M, SQL, R.

CERTIFICATIONS

Citi Certifications	Date Received
• Responsible Conduct of Research	January 2025
• Human Subjects Protections - Biomedical Focus	October 2024
• CITI Good Clinical Practice	January 2025
• Community Engaged Research	January 2025
UD Certifications	
• UD Advanced Chemical Hygiene/RTK Training	January 2025
• UD Biosafety Training	January 2025
• UD Bloodborne Pathogens Training	January 2025
• UD Safety Orientation and Right to Know	January 2025

AWARDS

• Elevator Pitch Competition Winner- Human Engineering Research Laboratories.	July 2022
---	-----------

PRESENTATIONS

• “Gait Variations among Adults with Lower-Limb Amputation and Chronic Low Back Pain” JM Witt , CE Vallery, SJ Stauffer, AK Shahi, JM Sions, <i>Oral Presentation</i> , American Orthotic & Prosthetic Association 2025 National Assembly, September 2025.
• “Walking through Pain: Gait Variations among Adults with Lower-Limb Amputation and Low Back Pain as Compared to Pain-Free Peers” Vallery CE, Witt JM , Stauffer SJ, Shahi AK, Sions JM, <i>Poster Presentation</i> , Delaware Center for Musculoskeletal Research 2025 Musculoskeletal Research Symposium, April 2025.
• “Circuit Development and Mechanical Testing of a Stance-Control Orthosis” J. Witt , L. Fertig, <i>PowerPoint Presentation</i> , Messiah University, School of Science, Engineering, and Health Symposium, Spring 2023.
• “Development of Novel Machine Learning Models to Assess Quality of Sitting-Pivot-Transfers Using Kinect Azure” J. Witt , <i>Poster Presentation</i> , University of Pittsburgh, Human Engineering Research Laboratories REU Presentation, July 2022.
• “A Low-Cost Microprocessor-Controlled Stance-Control Knee Orthosis for Pediatric Mobility Impairments” J. Witt , L. Fertig, <i>Poster Presentation</i> , Messiah University, School of Science, Engineering, and Health Symposium, Spring 2022.