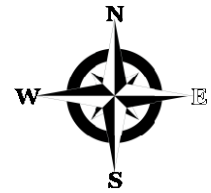


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Objective

To research, develop, and provide people with high-performance sensors and actuators for assistive devices that are intuitive, affordable, and accessible

Areas of Interest

Assistive Devices, Artificial Muscles, High Density Biosensor Arrays, and BioMEMS

Education

University of North Carolina at Chapel Hill (GPA 3.64): **Aug 2014-Aug 2018**

B.S. UNC/NC State Joint Department of Biomedical Engineering– *Honors and Distinction*

University of Utah (GPA 3.76): **Aug 2018-Present**

Ph.D. Biomedical Engineering – Bioinnovate Track

Work Experience

Lead Researcher of CSTAs – *Microsystems Lab (UofU)* **Aug 2018-Present**

- Designing and conducting experiments aimed at manufacturing concentric syndiotactic textile actuators (CSTAs), optimized for assistive device applications
- Designing and making scientific equipment to determine textile parameters

Founder & CEO – *GAIA, LLC* **Aug 2019-Present**

- Directing the R&D of the Myoplexer™ and other assistive device products
- Overseeing the patenting, regulatory, and financing processes of the company

Innovation Chair – *The Helping Hands Project, LLC* **Oct 2016-Aug 2018**

- Directing a R&D team that improved the organization and its pediatric prostheses
- Networking with professionals related to prosthetics and 3D printing

Research Intern – *Neuromuscular Rehab. Eng. Lab (NCSSU)* **May 2017-Aug 2017**

- Composing Matlab code to display High Density biosignals on 3D anatomical models
- Assisting with human experiments involving both amputees and able-bodied persons

Outreach Event Chair – *BME GSAC (UofU)* **Sep 2018-Present**

- Organizing a STEM education event focused on introducing children with limb differences and their parents to rehab engineering, while fostering community

Co-Founder – *Heimdall Health, LLC* **Jul 2019-Present**

- Leading the ideation, design, and implementation for the Mapping Otoscope™

Skills

Coding/Programming:

Matlab, Arduino, LabView, C++, and Python

Software:

SolidWorks, Adobe Illustrator, Adobe Premier Pro, Multisim, Eagle, and Comsol

Trade Skills:

PCB prototyping, 3D printing, Laser Cutting/Engraving, Lathing, and Woodworking

Awards and Certifications

- Bench to Bedside 2019 Grand Prize (\$25,000) – for Heimdall Health, LLC
- Bench to Bedside 2019 Best in Medicine (\$5,000) – for GAIA, LLC
- REU NSF Grant #1361549 Recipient (\$5,700)
- Get Seeded 2019 (\$1,600)– for GAIA, LLC
- Sarah Steele Danhoff Undergraduate Research Award (\$500)
- Office of Undergraduate Research Travel Grant (\$500)
- Eagle Scout (2010)
- AED, CPR, and Wilderness First Aid Certified
- CITI Biomedical Responsible Conduct of Research and Human Research