

# Myren DeShawn Sutton

St. Louis, Missouri (Open to Relocation / Remote) | (314) 308-0761 | [myrensutton@gmail.com](mailto:myrensutton@gmail.com)

**GitHub:** <https://github.com/ddsnph?tab=repositories> | **LinkedIn:** <https://www.linkedin.com/in/myren-sutton-ab233221b/>

Biomedical and Biological Engineer focused on electrophysiology and clinical technology. Experience in OR workflow, medical device support, and data driven problem solving. Skilled in ECG analysis, CAD modeling, and cross functional communication, with a strong reputation for building rapport quickly in clinical and team-based environments.

## Education

**University of Missouri – Columbia** Graduation May 2026  
Master of Science | Biological Engineering

**University of Missouri – Columbia**  
Bachelor of Science | Biomedical Engineering GPA: 3.76/4.00

## Clinical Shadowing and Experience

**Electrophysiology Immersion Program (EPI), Johnson & Johnson Medtech** January 2026

- EP training program involving live case observations, case review, mapping fundamentals, arrhythmia concepts, EP lab workflow, sales and business acumen, and direct exposure to clinical account specialist responsibilities

**Cath Lab, University of Missouri – Columbia (Dr. Arun Kumar)** November 2025

- Shadowed two TAVR procedures and observed an Edwards Lifesciences rep support valve preparation and deployment in OR setting

**Vascular Surgery, University of Missouri – Columbia (Dr. Jonathan Bath)** October 2025

- Observed a medical device representative assist vascular surgeons during the modification and implantation of a branched aortic graft, gaining insight into sales support, product preparation, and OR workflow

## Internships and Research

**Bioprocessing R&D Intern, Pfizer Pharmaceuticals** June 2025 – August 2025

- Designed and optimized workflows to increase experimental efficiency within the upstream bioprocessing R&D division
- Applied VBA scripting and advanced Excel functions to support process automation and data analysis in liquid handling systems

**Bioinformatics Research Intern, University of Missouri – Columbia, Dr. Praveen Rao's Lab** October 2022 – May 2025

- Led independent project “Clustering Genomic Variants Using Transformers”
- Built a data pipeline converting raw DNA sequences into VCF files and applied NLP-based transformer models for genomic clustering
- 1<sup>st</sup> Place Informatics Division Show Me Research Spring 2024

**Research Presentations:** 2022 Summer Research Forum, 2023 ABRCMS Phoenix, 2024 ABRCMS Pittsburgh, 2024/2025 Show Me Research Week

## Projects

**Cardiac Signal Simulation Tool** September 2025 – Present

- Developed MATLAB-based tool to simulate, filter, and visualize ECG signals with adjustable heart rate and noise level to model clinical variability
- Implemented real-time R peak detection and HR/HRV for rhythm interpretation

**Custom 3D Printed Splints** August 2024 – December 2024

- Developed a customizable, eco-friendly splint using 3D scanning and medical-grade ASA for rapid production
- Applied CAD modeling and scanning techniques to achieve precise, non-invasive fit measurements

**Pulse Oximetry Measurement** October 2024 – December 2024

- Designed a pulse oximeter circuitry with LEDs and photodiode sensors, used analog and digital filtering in LabVIEW to process pulse signals
- Gaining expertise in biomedical instrumentation and real-time data acquisition for health monitoring applications

## Technical Skills

- |                          |                   |                        |                    |
|--------------------------|-------------------|------------------------|--------------------|
| • ECG Signal Processing  | • CAD/SolidWorks  | • Machine Learning     | • Bash/Unix        |
| • Clinical Data Analysis | • Medical Imaging | • Fusion 360 / AutoCAD | • Microsoft Office |

## Work Experience

**Teaching Assistant (TA), University of Missouri – Columbia** August 2025 – Present

- Support instruction for Fluid Mechanics for Biomedical Engineers and MATLAB
- Provide tutoring and grading support, reinforcing technical concepts and analytical reasoning

**Residential Advisor, University of Missouri – Columbia** August 2023 – Present

- Manages a diverse community of 700+ individuals, delivering mentorship, conflict resolution, and resource support within 22-member team

**Retail Sales Associate, Target** June 2022 – August 2022

- Customer Service Delivered by assisting shoppers, managing inventory, and maintaining organized, visually appealing sales area

## Involvement

**National Society of Black Engineers (NSBE)** August 2023 – Present

**Technical Outreach Community Help (T.O.R.C.H.) Chair** July 2025 – Present

- Organizing 3+ outreach events including housing for the homeless and engineering events for grades 6-12 to promote STEM

**Health Industry Sales Club (HISC)** August 2025 – Present

- Attend speaker sessions with medical device sales professionals to learn industry roles and career pathways