

Aaron Lorenzo Woods

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Department of Biomedical Engineering
Cockrell School of Engineering
The University of Texas at Austin
Austin, TX 78712

EDUCATION

Ph.D. Biomedical Engineering University of Texas at Austin Portfolio in Imaging Science	June 2026 (<i>expected</i>) GPA: 4.0
B.S. Engineering Leadership University of Texas at El Paso (UTEP) Minor in Commercial Music and Recording	December 2020 GPA: 3.46

ACADEMIC APPOINTMENTS

Graduate Student Researcher University of Texas at Austin, Department of Biomedical Engineering	2021 – Present
Undergraduate Student Researcher UTEP, Department of Engineering Education and Leadership	2019 – 2020
Undergraduate Student Researcher University of Wisconsin-Madison, Department of Biomedical Engineering	Summer 2018, 2019
Undergraduate Teaching Assistant UTEP, Department of Engineering Education and Leadership	Spring 2018

RESEARCH EXPERIENCE

Graduate Student Researcher , University of Texas at Austin Department of Biomedical Engineering <i>Advisor: Dr. Andrew Dunn</i> <ul style="list-style-type: none">Developing microvasculature optical imaging techniquesInvestigating digital image processing and quantificationTraining on surgical craniotomies for biomedical imaging	2021 – Present
Graduate Student Researcher , University of Texas at Austin Department of Biomedical Engineering <i>Advisor: Dr. Mia Markey</i> <ul style="list-style-type: none">Design of decision support system for breast cancer patients	Fall 2021 (<i>rotation</i>)
Graduate Student Researcher , University of Texas at Austin Department of Biomedical Engineering <i>Advisor: Dr. Evan Wang</i> <ul style="list-style-type: none">Conducted EEG data acquisition and analysisCreated SOP for fabricating dry electrodes for long recordings	Summer 2021 (<i>rotation</i>)

Undergraduate Student Researcher , University of Texas at El Paso CREaTE Lab I <i>Advisor: Dr. Peter Golding</i> <ul style="list-style-type: none"> Innovated on engineering education regarding ethics and leadership Programmed advising software to assist with course recommendation Optimized the advising process to better facilitate faculty and student 	2019 – 2020
Undergraduate Student Researcher , University of Wisconsin-Madison Adult Neurology Ketogenic Diet Therapy Clinic I <i>Advisor: Dr. Elizabeth Felton</i> <ul style="list-style-type: none"> Data visualization of patient data for clinical and dietary analysis Managed HIPAA compliance, safety, and ethics for patient research Shadowed doctor-patient relationship and treatment of epilepsy 	Summer 2019
Undergraduate Student Researcher , University of Wisconsin-Madison Biomedical Optics Lab I <i>Advisor: Dr. Jeremy Rogers</i> <ul style="list-style-type: none"> Constructed an interferometer to measure phase delay Programmed an automated calibration software for optical equipment Inspected laboratory standards and practices for maintaining lab 	Summer 2018

TEACHING EXPERIENCE

Undergraduate Teaching Assistant , University of Texas at El Paso Department of Engineering Education and Leadership I <i>Design Nature</i> <ul style="list-style-type: none"> Coordinated the trainings of students to use a fabrication laboratory Taught procedures on computer-aided design and simulation Directed the development process to build working prototypes 	Spring 2018
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RESEARCH FUNDING

Ruth Kirchstein Imaging Science Fellowship , National Institutes of Health <ul style="list-style-type: none"> \$27,591 awarded over 1 year 	2021 – 2022
West Texas Fellowship , The University of Texas at Austin <ul style="list-style-type: none"> \$32,000 awarded over 1 year 	2022 – 2024
Cockrell School Fellowship , The University of Texas at Austin <ul style="list-style-type: none"> \$20,000 awarded over one year 	2024 – 2025
Thrust Fellowship Supplement , The University of Texas at Austin <ul style="list-style-type: none"> \$36,000 awarded over four years 	2021 – 2025
Dean's Fellowship Supplement , The University of Texas at Austin <ul style="list-style-type: none"> \$1,000 awarded over one year 	2021

PUBLICATIONS

Niemeier, R., N. Schnoor, **A.L. Woods**, and J.D. Rogers, "Calibration of liquid crystal variable retarders using a common-path interferometer and fit of a closed-form expression for the retardance curve," published to Applied Optics, October. 2020.

HONORS & AWARDS

Engineering Leadership Character Award , University of Texas at El Paso Awarded by staff, teachers, and the department chair to one graduating student who exhibits exceptional character.	2020
Hunt Startup Sponsorship , Arrowhead Center	2020
Bob & Diane Malone Leadership Scholarship University of Texas at El Paso	2016 – 2020
Theta Delta Lambda Education Scholarship , University of Texas at El Paso	2016
Robert G Neill, Jr Scholarship , University of Texas at El Paso	2016
College of Engineering Dean's List , University of Texas at El Paso	2016 – 2018

POSTER PRESENTATIONS

Arron L. Woods; Daniel Y. Chu; Michele N. Ravelli; Kelly Faltersack; Elizabeth Felton.
Carnitine Deficiencies: Clinical Insights for Ketogenic Diet Therapies. UW- Madison
SURE Poster Session, Madison, WI, USA, July 31, 2019

Arron L. Woods; Jeremy D. Rogers. **Automated Calibration of Liquid Crystal Variable Retarder.** UW- Madison SURE Poster Session, Madison, WI, USA, July 31, 2018

ESW-UTEP. Project Mine-Rcycler: **Producing filament and 3D printed consumer goods from plastic waste.** Engineers for a Sustainable World 2019 Annual Conference Poster Session, El Paso, TX, USA, April 5, 2019

PROFESSIONAL EXPERIENCE

Board Member , Executive Coordinating Committee I ICC Austin	2021 – 2022
Community Outreach Specialist , University of Texas at El Paso	2020
Project Analyst , University of Texas at El Paso	2018 – 2019
Sound Engineer , Beacon Hill Recording Studios, LLC	2018 – 2019
Student Ambassador , Amazon I Riddle and Bloom	2018 – 2019
Project Engineer , Sonora Bank	2017

COMMUNITY SERVICE

Community Organizer , Sunrise Movement El Paso	2020 – 2021
Social Chair , Green Team	2020
Webmaster , Engineers for a Sustainable World	2017 – 2019
College Recruiter , University of Texas at El Paso	2018
Volunteer Leader , Young Life College	2016 – 2018

CONFERENCE PARTICIPATION

Latinx Student Leadership Community Summit , Google	2020
Neuroscience Initiative to Enhance Diversity Program , UC Davis	2020
Social Change Leadership Summit , UTEP	2019 – 2020
Opportunities in Engineering Conference , UW-Madison	2018