

BRADEN S. STARVER

ATLANTA, GA 30313 | (412)-905-9395 | BRADEN.STARVER@MOREHOUSE.EDU | U.S CITIZEN | SECURITY CLEARANCE

EDUCATION

MOREHOUSE COLLEGE | ATLANTA, GA

AUGUST 2022 - PRESENT

Bachelors of Science in Applied Physics, GPA: 3.64

Expected Graduation May 2026

- Concentration in Electrical Engineering (Junior)
- Michael Lomax Student Success Scholarship Recipient
- Sigma Pi Sigma Physics Honors Society Member

EXPERIENCE

GEORGIA INSTITUTE OF TECHNOLOGY | ATLANTA, GA

MAY 2024 - PRESENT

Research Assistant in CHAOS Lab | Department of Physics

Biophysics research laboratory that focuses on the non-linear dynamics of living systems and studies arrhythmias in cardiac tissue. Work includes human, frog, pig and fish heart simulations and experiments to induce fibrillations.

- Designed programmable microcontroller to consistently induce ventricular fibrillation using the S1-S2 Protocol.
- Induced Arrhythmia in frog and pig hearts with a ~80% success rate within <20 seconds of protocol initiation.
- Permanent piece of laboratory equipment that can be modified and used for a multitude of experiments.

AUBURN UNIVERSITY | AUBURN, GA

MAY 2023 - JULY 2023

Research Assistant in Beckingham Polymer Group | Department of Chemical Engineering

Polymer Science research laboratory focusing on polymer architecture, synthesis and material testing. Projects focus on membrane materials, advanced polymer manufacturing, and mechanical testing of properties.

- Synthesized Liquid Crystal Elastomers capable of programmable shape change through heat transmutations.
- Conducted mechanical trials with bi-layer LCE membrane ranging from 300-600 microns with mylar or kapton.

HBCU GREEN FUNDS | ATLANTA, GA

SEPTEMBER 2022 - JUNE 2024

Energy Fellows Contractor | Independent

Group sanctioned by Gemini Energy Solutions to conduct energy audits in the Atlanta metropolitan area. Targeting primarily disenfranchised communities, retail, and religious institutions to help reduce energy cost and adopt green energy methods.

- Performed energy audit on the 5 story Martin Luther King Jr. Municipal Building in Miami, Florida.
- Developed land for urban farming and assisted in collecting soil samples, and clearing foliage and trash.

SKILLS

PROFESSIONAL ORGANIZATIONS: National Society of Black Engineers & Black Physicists, National Society of Physics

PROGRAMMING: C++ (Competent), JavaScript (Competent), Python (Novice), Lua (Novice)

SOFTWARE: Arduino IDE, ROBLOX Studio, Fusion 360, Blender, Final Cut Pro

ACTIVITIES

- STREET PHOTOGRAPHER: Independent photographer to document the lives of everyday Americans in their truest forms.
- SIGMA PI SIGMA PHYSICS HONORS: Advocacy and representative for Honor and stewardship in Physics Honors.
- PHYSICS & MATH TUTORING: Approachable individual to help underclassman with intro level math and physics courses.
- TRULY LIVING WELL VOLUNTEER: Maintain and water crops, along with urban farming advocacy and recruitment on campus.

INTEREST

- Electronic Devices, Circuit Technology, Nanotechnology, Experimental Research, Bioengineering, Biophysics