Paul Bessler

US Citizen | (210) 540-9637 | paulwbessler@utexas.edu | linkedin.com/in/paulwbessler

EDUCATION

Bachelor of Science, Electrical & Computer Engineering, University of Texas **Expected Graduation: Dec 2024**
Concentration: Computer Architecture & Embedded Systems **Cumulative GPA: 3.8 | University Honors**

EXPERIENCE

Texas Inventionworks Student Technician, University of Texas **06/2022 – Present**
- Provide training, advice, and consultation to students and faculty on engineering projects
- Operate and repair a variety of manufacturing machines including 3D printers and laser CNC machines

IEEE Corporate Liaison, University of Texas **05/2022 – Present**
- Consolidate and maintain the organization's relationships with external corporate contacts
- Organize corporate sponsorship planning and event logistics for 20+ events throughout the year

Integrated Nano Computing (INC) Lab Assistant, University of Texas **01/2022 – Present**
- Develop neuromorphic computing systems using Domain Wall-Magnetic Tunnel Junction devices (DW-MTJs)
- Simulate devices in a spiking neural network and Boltzmann machine using Python
- Graph and interpret resulting data to develop insights on functionality and future improvement

Videographer and Video Producer, Children's Ballet Of San Antonio **06/2020 – 07/2020**
- Captured video content of rehearsals, productions, and other events
- Edited and produced promotional, marketing, and educational videos for public release

Guest Relations & Video Producer, Dance Center of San Antonio **03/2018 – 05/2021**
- Captured video content of classes, auditions, and promotional material
- Explored & selected new products to market to customers

PROJECT EXPERIENCE

INC Lab Summer REU Researcher, University of Texas **06/2022 – 07/2022**
- Modeled stochastic computing using a Boltzmann Machine with Magnetic Tunnel Junctions
- Created and presented a research poster based on the resulting data (Available on LinkedIn)

Recreation of 2048 on the Texas Instruments TM4C, University of Texas **04/2022 – 05/2022**
- Designed and soldered a custom PCB using Eagle, Programmed in C++

Robotics and Automation Society (IEEE RAS) Robotathon, University of Texas **11/2021 – 11/2021**
- Designed, built, and programmed TM4C robot to follow lines and walls and launch ping pong balls

SEC First-Year Case Competition, University of Texas (Sponsored by General Motors) **11/2021 – 11/2021**
- Presented a security software outline to improve General Motors' electric vehicle sales

SEC Make-a-thon, University of Texas (Sponsored by Chevron) **10/2021 – 10/2021**
- Designed, fabricated, and pitched a prototype of a 2-in-1 mobile workstation to a panel of judges

SKILLS

Software: Python, C, Arduino, Assembly Language, Git, Eagle, Visual Studio Code, LTspice, DaVinci Resolve, Autocad, Fusion 360, Microsoft Office
Hardware: Lathe, Bandsaw, Drill Press, Mill, Plasma Torch, Welder, 3D Printer, Laser CNC

HONORS | ACCOMPLISHMENTS

- Hispanic Scholarship Fund Scholar **2022**
- Rey Feo Scholarship Recipient **2022**
- Summer Research Grant Recipient, National Science Foundation, University of Texas **2022**
- Alpha Lambda Delta (The Honor Society for First-Year Academic Success) **2022**
- Phi Eta Sigma (National Honor Society for First-Year College Students) **2022**
- 1st-place team, IEEE RAS Robotathon, University of Texas **2021**
- 2nd-place team, SEC (Student Engineering Council) Make-a-thon, University of Texas **2021**
- 2nd- place team, SEC First-Year Case Competition, University of Texas **2021**