



Robert Trankley Mahler III

Computer Engineer



Education

The University of Texas at Dallas

August 2020 – December 2023

Bachelor of Science in Computer Engineering

Experience

Senior Computer Engineer - Team Leader

June 2023 – December 2023

University of Texas at Dallas | Senior Capstone Project

Richardson, TX

- Oversaw product planning, research, technical development, and fundraising activities for our Hover DR1 device, an audio-based hoverboard drone attachment.
- Awarded first place among twenty teams at the UTD Senior Design EXPO.
- Conducted weekly stakeholder meetings, improving goal alignment and timeline adherence by 15%.
- Diagnosed and debugged hardware and software issues to maximize performance and reliability.
- Developed microcontroller code in C++, utilizing Fourier transforms to achieve accurate audio frequency translation.
- Launched a Kickstarter campaign and raised over \$1,500 for the initial product.
- Designed a comprehensive user manual, enhancing product safety and providing technical support.

Project Engineer

August 2023 – December 2023

University of Texas at Dallas | IOT Capstone Project

Richardson, TX

- Devised an edge-computing fishing rod analyzer detecting bites, cast distance, and line speed with 95% accuracy.
- Created a multi-class object detection algorithm using TensorFlow Lite, identifying thirty-one different fish species with over 80% accuracy, enhancing the device's real-time analysis capabilities.
- Integrated the device with Amazon Web Services (AWS) for robust data management.
- Employed SolidWorks CAD software to fabricate the mount and components for the device.

Brand Ambassador

February 2019 – May 2019

Verizon Wireless

San Antonio, TX

- Informed over five hundred customers daily about product quality, value, and capabilities, enhancing customer satisfaction.
- Educated customers on the new Verizon 5G products and services while aiding them in selecting products.
- Bolstered customer confidence by actively listening to their concerns and giving proper feedback.

Information Technology/Quality Assurance Manager

June 2015 – June 2021

ADS Media Group (Fusion92)

Boerne, TX

- Programmed and tracked five hundred GPS units, ensuring ground crew task completion.
- Manufactured over twenty low-cost and highly efficient computer systems while detecting, documenting, and mitigating all risks associated with computer assembly.
- Supervised over three hundred operational employees across the US to ensure delivery and completion of multimillion-dollar client marketing projects.

Affiliations

- Eagle Scout in Boy Scouts of America
- VP of Student Organization at The University of Texas at Dallas
- Treasurer of Student Organization at The University of Texas at Dallas

Contacts

Address: 107 Kendall Woods

Dr, Boerne, TX 78006

Phone: (830) 431-2888

Email: Trankley@gmail.com

Portfolio: Trankley.github.io

Skills

Technical Skills:

Java

C++

Python

MATLAB

Embedded Systems

Computer Architecture

Internet of Things

Machine Learning

Git

Junit

Xilinx Vivado

Integrated Circuits

PSpice

Cadence

Power Electronics

Telecommunication Networks

Digital Circuits

Soft Skills:

Leadership

Communication

Strategic Planning

Public Speaking

Project Management

Fundraising