# **Evan Palmer**

832-748-8692 · evancp311@gmail.com

#### **EXPERIENCE**

National Oilwell Varco Renewable Energy R&D, Navasota, Texas

May 2023-August 2023

Research & Development Engineer (Internship)

- Constructed a fully functional prototype of a sun tracking solar array.
- Developed a more efficient and user-friendly functional prototype of a current product with a cost reduction of ~90%.
- Produced a Python model to simulate and display load bearing support stress.
- Improved design prototyping by adding adjustable parameters using numpy, pandas, and matplotlib.

#### Trident Research LLC, Austin, Texas

May 2022-August 2022

IT Specialist (Internship)

- Assisted IT department to plan, budget, and construct an accredited stand-alone government network enclave.
- Conducted hardware and software trade studies to determine optimal network devices for speed and efficiency.

# J. Mike Walker '66 Department of Mechanical Engineering

**January 2021-May 2023** 

Undergraduate Research Assistant

- Implemented and compared machine learning models for the prediction of the electrochemical performance of superconductors using scikit-learn, numpy, and pandas.
- Corresponded with other members within research group virtually to draft research papers.

# Capstone Project Halliburton Wellbore Sensors, Texas A&M University August 2022-May 2023 Designer

- Implemented engineering design principles to produce customized solutions for clients, resulting in a 40% increase in customer satisfaction and a 25% reduction in project timeline.
- Developed customized test setups for sensor package solutions utilizing Solidworks modeling and Python signal processing packages; achieved a 30% reduction in false readings.
- Simulated downhole well conditions and chemical solution reactions using Ansys.
- Conducted trade study of oil and drilling products to evaluate cost effectiveness and usage for customer needs.

# MEEN 408 Agricultural Harvest Bot, Texas A&M University

August 2022-December 2022

Project Manager and Designer

- Created Matlab program to direct end-effector positioning of robotic manipulator using kinematic equations to harvest tomatoes.
- Coordinated meeting times and due dates with team members on tasks, completing product a week in advance of final deadline.

## **Robomasters**, Texas A&M University

August 2021-May 2023

Robot designer

- Designed and constructed feeding and aiming subsystems of dart launching robot in Onshape, reducing loading and target tracking time by 50%.
- Coordinated with team lead to delegate tasks and train new members, increasing productivity and efficiency of task completion by 25%.

## Future Set Tech Camp, Austin, Texas

**June 2021-August 2021** 

Programmer and Instructor

- Introduced and developed kids' programming skills in Python, JavaScript, HTML, and C++ through game development and web design.
- Improved course structure and design through feedback to improve engagement and clarity of concepts.

#### **EDUCATION**

**Texas A&M University,** *College Station, Texas* Mechanical Engineering - Bachelor of Science Computer Science - Minor

December 2023

## **PUBLICATIONS**

"Data-Driven Predictive Electrochemical Behavior of Lignin-Based Supercapacitors via Machine Learning," Energy & Fuels, 2021

"Machine learning-assisted materials development and device management in batteries and supercapacitors: performance comparison and challenges," Journal of Materials Chemistry A, 2023

#### **SKILLS**

Ansys, Solidworks, Simulink, MATLAB, PID control, carpentry Linux, Python, JavaScript, C++, Java, Haskell, machine learning