## **Matthew Owen**

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#### **EDUCATION**

# Texas A&M University, Mays Business School

Master of Business Administration

College Station, Texas August 2026

# Texas A&M University, College of Engineering

Bachelor of Science, Electrical Engineering

Minor in Mathematics

College Station, Texas May 2025

#### **EXPERIENCE**

## **Los Alamos National Laboratory**

Undergraduate Intern II, Sigma ( $\Sigma$ ) Division

Los Alamos, New Mexico May 2023 – May 2025

- Improved alloy production efficiency by 800% by redesigning copper hearth component, used in the manufacturing process
- Optimized a high-vacuum system used in the alloy fabrication process, reducing the probability of defects in the samples by 5%
- Engineered and developed over 40 arc-melted metal alloys of various compositions to generate training data for an AI model aimed at predicting mechanical properties
- Delivered and presented detailed reports to senior-level management, recommending improvements regarding manufacturing processes

## Los Alamos National Laboratory

Undergraduate Intern I, Sigma ( $\Sigma$ ) Division

Los Alamos, New Mexico May 2020 – May 2023

- Optimized the production process of radioimmunotherapy isotopes by assisting in the development of a reliable supply chain for cancer treatment applications
- Performed forging operations and safely handled radioactive materials, including uranium and thorium, using Integrated Safety Management (ISM) skills
- Developed design improvements for a microwave furnace that melts Uranium and other hazardous materials

#### **PROJECTS**

## **Senior Capstone Design**

Project Manager

College Station, Texas

August 2024 - May 2025

- Led a team of four in developing a wired gas monitoring device for livestock facilities, achieving over 95% successful data transmission to a custom web dashboard
- Fabricated and tested four custom printed circuit boards with over 100 components that converted 120V AC to DC, ensuring reliable sensor performance and stable Wi-Fi communication
- Programmed an ESP-32 microcontroller to integrate sensor inputs and enable system functionality

## **LEADERSHIP**

## **Texas A&M Fly Fishing Club**

Vice President/Founding Officer

College Station, Texas August 2023 – May 2025

- Led fly fishing excursions for the club, which ranged from 50 to 100 members each semester
- Established the first Trout Unlimited (TU) Costa 5 Rivers Club Program in the state of Texas and expanded TU chapters to three additional universities in Texas
- Increased membership by 50% through various recruitment events including fly tying nights, casting clinics, and informational booths

### SKILLS, AWARDS, & INTERESTS

Clearance: DOE Top Secret O Clearance

Technical Skills: C++, Python, Altium, LTSpice, Verilog, ARM v8, Microsoft Excel, Multisim, MatLab

Awards: ENGR MBA Program Scholarship, LANL Spot Award

Interests: Golf, Fly Fishing, Hunting, Camping, Hiking