Elliot Molle

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EDUCATION

The Texas A&M University

College Station, TX

B.S. Electrical Engineering Minor in Mathematics

May 2027 GPA: 3.43/4.00

TECHNICAL PROJECTS

Micro-Scale Brushless Motor Energy Generation System

May 2025

- Created a self-contained power system with a brushless motor and multi-stage regulation for phone charging.
- Integrated rectifier, battery storage, buck converter, and USB-C breakout board for voltage regulation and storage.
- Verified circuit stability with LTSpice and applied soldering skills to transition from prototype to permanent solution.

Salvaged Component Integration and Custom CAD Enclosure Design

July 2024

- Salvaged components from a Lenovo ThinkPad and repurposed them into a DIY standalone monitor and webcam.
- Restored laptop display using an LCD controller and designed custom 3D-printed case in SketchUp for mounting use.

• Adapted internal webcam wiring to a USB interface, transforming it into a fully functional external webcam device.

Raspberry Pi LED Board

Jan 2024

- Developed Python scripts to control Raspberry Pi GPIO pins, enabling responsive LED board interaction and testing.
- Implemented pulse-width modulation to achieve dimming effects, timing sequences, and dynamic pattern generation.
- Optimized LED control system by refining code structure and validating performance across multiple operating states.

SKILLS

Certifications: CCNA, CompTIA Security+

Modeling & Simulation: LTSpice, MATLAB/Simulink, Verilog, Autodesk AutoCAD Power and Circuits: Rectifiers, buck/boost converters, inverters, safe lab practice

Hardware and Lab: Oscilloscopes, DMMs, bench supplies, soldering, waveform analysis, prototyping

Embedded & Control: Python/C++/MATLAB scripting, Raspberry Pi, FPGAs

Networking: Dynamic Routing Protocols, DHCP, IPv4/6, security assessment, public key infrastructure

Professional Skills: Technical writing and presentation, Analytical thinking, Microsoft Office, Team collaboration **Honors/Awards**: IT Quizbowl Captain and State Victor, IT SkillsUSA Sergeant-at-Arms, AP Scholar with Honor

PROFESSIONAL EXPERIENCE

SoftServe Inc.

Austin, Texas

Software Engineering Internship

May 2024 - August 2024

- Partnered with leadership to deconstruct monolithic architecture, enabling scalability and future software flexibility.
- Drafted and proposed a microservices-based architecture to streamline integration of prior acquisitions and systems.
- Ensured architecture design supported seamless growth, improving adaptability and preparing for future expansion.

TapOut Tech Repair

College Station, TX

Owner and Operator

August 2023 - Present

- Grew TapOut Tech Repair from scratch by marketing to Jiujitsu teammates, gaining steady word-of-mouth clients.
- Expanded services from laptop screen and peripheral repair into phone repair after mastering laptop techniques.
- Built customer trust by delivering fast, precise repairs and scaling business through referrals and repeat clients.

Freddy's Frozen Custard & Steakburgers

Katy, Texas

Coldline Trainer

March 2022 - August 2022

- Delivered strong customer service by resolving order discrepancies and ensuring a smooth, positive guest experience.
- Mentored and certified new Coldline employees, guiding them on technical systems, safety protocols, and procedures.
- Supported daily operations by combining customer focus with team training to improve efficiency and overall service.

EXTERNAL INVOLVEMENT

Texas A&M Brazilian Jiujitsu

Aug 2024 - Present

Officer of Events & Outreach, Competition Team Member

- Raised \$6k+ through profit-sharing & social media crowdfunding campaigns with local businesses for team initiatives
- Coordinated with 4 officers to manage travel logistics for 30+ members attending national events and tournaments
- Competed as an active Jiu-Jitsu team member while fostering team morale & unity during training & competitions

Texas A&M Computing Club

Aug 2023 - Present

Member

- Engaged in collaborative projects to gain hands-on experience with real-world computing applications.
- Applied skills in Python and C++ while developing projects designed to positively impact my community.
- Strengthened problem-solving and teamwork abilities by contributing to projects with direct community applications.