

Leonard Buckel

11417 Running Brush Lane • Austin, Texas 78717 • leo.j.buckel@gmail.com • 512-481-8856

Education

Texas A&M University

Aug 2024 - May 2028

Mechanical Engineering, GPA: 3.851

Relevant Coursework: Statics, Engineering Graphics (CAD), Statistics, and Materials Science

Project

Hi-Fi Speaker Build

Summer 2025

- Designed 3-way speakers in Fusion 360, integrating mechanical and aesthetic design while considering material and structural constraints.
- Modeled and tested enclosures in WinISD, implementing port tuning and frequency analysis to achieve an F3 near 35 Hz.
- Manufactured speakers with resonance suppression, employing damping techniques to reduce unwanted vibrations and distortion.
- Soldered and wired crossover network, ensuring proper frequency distribution to drivers and reliable performance for 150-watt speakers.

Electric Go-Kart

Summer 2023

- Modified a wooden go-kart design to integrate an electric motor, controller, and battery system.
- Fabricated wooden chassis and body panels using saws, drills, and fasteners, ensuring structural strength and alignment for safe operation.
- Wired and assessed the electrical system, including throttle control, head lights, and battery equalizer.

2D Pixel Platform Game

Summer 2024

- Built a 2D platformer game in Unity with custom pixel-art assets and interactive environments.
- Implemented core gameplay mechanics including player movement, jumping physics, and collision detection.
- Developed skills in C# scripting, object-oriented programming, and iterative debugging in Unity.

Leadership & Activities

Freshmen in Engineering, Science, and Technology (FEST)

Oct 2024 - Present

- Leadership organization focusing on professional growth through mentorship and guest speakers.
- Mentoring first-year students, providing guidance and support to help them navigate academic and campus life.

American Society of Mechanical Engineers (ASME)

Aug 2024 - Present

- Member of ASME at Texas A&M, attending meetings and learning about mechanical engineering applications, while applying to take part in the ASME Go-Kart Program.
- Participated in networking events with industry professionals, gaining exposure to current trends in mechanical engineering.

Skills & Interests

Technical: Solid Works, Fusion 360, Python, Soldering, and Wood Working.

Language: Fluent in German and English.

Interests: Top Rope Rock Climbing, Volleyball, League of Legends, Cooking, and Soccer.