MASON REY MUNOZ

409-365-7507 • msnmnz@icloud.com • linkedin.com/in/msnmnz • masonmunoz.net

EDUCATION

B.S., Mechanical Engineering — May 2022
Lamar University, Beaumont, TX — **4.0 GPA**
Honors: Plummer Award Recipient, Summa Cum Laude

TECHNICAL SKILLS

Mechanical Design: SOLIDWORKS, 3D Printing, AutoCAD, Simulink, Ansys Fluent
Programming: Python, JavaScript, MATLAB, HTML, CSS, LaTeX
Misc. Software: Blender, Photoshop, Microsoft Office Suite, Git, After Effects
Certifications: Engineer-In-Training (E.I.T.) – May 2024
SOLIDWORKS CAD Design Associate (C.S.W.A.) – February 2025

PROFESSIONAL EXPERIENCE

St. Charles Borromeo Catholic Church, Nederland, TX: Staff Pianist/Sound Tech — August 2015 – Present
- Performed piano and organ repertoire for traditional masses and funerals; attended rehearsals weekly
- Optimized the professional sound and network infrastructure to improve the sound quality for other performing musicians and the audience
- Executed the duties of a stagehand; Leveraged acoustic theory to determine ideal placement of microphones to avoid feedback and other problems during mass

Lamar University, Beaumont, TX: Research Assistant — May 2021 – Aug 2021
- Assisted the principal researcher in efforts to understand and combat the corrosion of vessels in the gulf
- Prepared delicate samples of various metals in a lengthy process that involved soldering, mounting in resin, grinding, and polishing
- Analyzed samples in a microscope after electrolytic corrosion, and developed programmatic methods to determine sizing and density of corrosion pits

PROJECTS

Texas Space Grant Consortium Design Competition — Fall 2021 – Spring 2022
Led a team to design, build, and test a telescopic antenna mast for a lunar mission (SOLIDWORKS).
- Communicated each step in design process to a NASA mentor during weekly check-ins
- Followed strict design criteria set by launch conditions and lunar environment
- Employed engineering analysis and simulations to validate performance and authored a comprehensive technical paper submitted to the Texas Space Grant Consortium

Electronics Thermals Testing — Fall 2021
Empirically examined the thermal efficiency of different cooling mechanisms for a CPU.
- Experimented with a heat exchanger system, fans, and heat sinks to collect temperature data
- Compared test results with theoretical values based on heat transfer equations

Home Networking — Winter 2025
Installation and maintenance of home server rack to learn networking as a hobby enthusiast
- Configured hypervisor for virtual machines dedicated to tasks such as web hosting, radio broadcasting, security monitoring, and sandboxing
- Deployed Raspberry Pi to serve as home assistant hub to communicate with other devices on isolated VLAN

ACTIVITIES

Private Music Lessons — Winter 2024 – Present
Shared a lifetime of musical knowledge with serveral students on percussion and piano.
- Coordinated lesson plans from the ground up catered to each individual student
- Self-managed scheduling and bookkeeping