Max Haberer

 Jurassic001 | Max Haberer | mhaberer25@gmail.com | +1 214-533-6390

SUMMARY

Computer engineering student with hands-on experience in systems engineering, software development, aerial vehicles, and robotics. Experienced with design and implementation of integrated control systems and software, applying requirements analysis, verification, and validation processes. Passionate about aerospace innovation, control system modeling, and computer architecture.

EDUCATION

Texas A&M University | College of Engineering   Aug 2025 - Present

Bachelor of Science, Computer Engineering (CPEN)

Highland Park High School   Sep 2021 - May 2025

Honors & Societies: Boy Scouts of America, National Honors Society, Young Men's Service League

LEADERSHIP & PROJECT EXPERIENCE

Texas A&M Sounding Rocketry Team - Avionics Engineer   2025 - Present

– Developed, tested, and deployed embedded systems for telemetry, onboard logic, and radar systems on high-powered rockets

Bell Advanced Vertical Robotics Competition - AVR Drone Lead   2023 - 2024

– Spearheaded software development enabling autonomous drone flight using timing, inertial-based, and visual-based tracking mechanisms

– Developed, integrated and tested independent unmanned vehicle subsystems, including thermal detection & processing and electromagnet control firmware

– Modeled rotor downwash using CFD analysis and component strength in Fusion 360 to determine optimal designs for 3D-printed mechanisms

– Redefined system architecture, eliminating dependencies on 5 GHz WiFi and an external ground control station, improving vehicle performance in unpermissive RF environments

– Conducted verification testing of drone systems in a recreated competition field, executing full mission tests that simulated competition conditions. Managed time and tracked metrics during these tests to evaluate operational performance, identify failure points, and refine hardware and software implementations

Eagle Scout Project   2024

– Organized and led a team of Boy Scouts to restore a community garden at an elderly living facility, guiding them through problem-solving and project delivery

– Planned project phases, coordinated resources, and managed timelines while communicating with facility staff and volunteers

Simple_ytdl   Project GitHub Link

– Developed an easy-to-use program for downloading YouTube videos at high quality, utilizing industry standard binaries to download, process, and convert video and audio files

– Applied structure to feature development and bug tracking, using self-developed workflows and source control best practices

– Established deployment and testing pipeline, managing cross-platform version releases distributed on GitHub

SKILLS

Programming & Software	Python, Rust, Embedded C, C++, C#, Docker, Git/GitHub, CubeIDE, VS Code
Equipment	3D Printing, STM32 Microcontrollers, PCB Design, Soldering, Multimeters, Standard tools
Misc	Systems Engineering, DevOps, Autodesk Fusion 360, Adobe Photoshop