Steven Gallaga

Portfolio: gallagasportfolio.com

st.gallaga@gmail.com

PROFESSIONAL EXPERIENCE

Professional Cohort | NASA L'SPACE Proposal Writing & Evaluation Experience Academy

Sept 2025 – Present

LinkedIn

- Selected to participate in a competitive NASA-sponsored academy focused on proposal writing, project development, and peer evaluation.
- Collaborating with a multidisciplinary team to identify NASA mission needs, develop innovative solutions, and draft a professional-quality proposal.
- Gaining experience in technical writing, systems engineering processes, and proposal evaluation aligned with NASA standards.
- Engaged in workshops to strengthen communication and leadership in aerospace project development.

Robotics Teleoperator | Armstrong Robotics

April 2025 – Present

- Robotic System Control Operator supporting real-time robotics supervision and autonomous operations; monitor telemetry from Al-powered robotic arms using RViz for 3D visualization, Slack for coordination, and contribute to performance documentation in dynamic environments.
- Primary point of contact for anomaly resolution; troubleshoot system crashes via root cause analysis using Linux terminal (tmux), command-line resets, and parameter tuning.
- Adapt to real-time changes in autonomous operations by collaborating with cross-functional teams and on-site
 operators via Google Meet to perform hardware resets, manual interventions, and installation support.
- Maintain detailed operational logs using Google Notes and Trello and escalate issues through Slack for rapid troubleshooting and solution verification.

Mechanical Engineering Intern | ALEF Aeronautics

Jan 2024 - Oct 2024

- Led full-stack mechanical design of components in SolidWorks for early-stage EVTOL flight systems—covering
 end-to-end development from initial concept through testing, iteration, and finalization. Projects included
 battery enclosures, chassis integration points, and test fixtures.
- Participated in iterative design reviews and coordinated directly with lead engineers and manufacturers to meet tolerance and material constraints; used Ultimaker Cura for 3D print preparation.
- Contributed to in-shop fabrication including carbon fiber panel production via vacuum bagging and curing, mold creation, and hands-on prototyping.
- Communicated via Discord and logged daily project status and collaborative design changes on Google Sheets.

ENGINEERING PROJECTS

A380 Safety Test | San Jose State University (www.gallagasportfolio.com/a380)

Jan 2022 – May 2022

- Conducted MATLAB simulations to assess takeoff and landing safety metrics, rejected takeoff speeds, and flight dynamics under emergency conditions.
- Produced performance data reports and evaluated real-world failure margins to validate system reliability and compliance with safety standards.
- Strengthened data interpretation and troubleshooting skills for flight-critical parameters and control scenarios.

C-5A Stability Test | San Jose State University (www.gallagasportfolio.com/c-5a)

Aug 2021 - Dec 2021

- Implemented a PID controller in MATLAB to stabilize the C-5A Galaxy in both longitudinal and lateral axes, enhancing understanding of flight control systems.
- Used simulated data to verify dynamic response and compare stability results with manufacturer benchmarks.
- Enhanced knowledge in control theory, aircraft dynamics, and hands-on use of MATLAB for tuning flight models related to autonomous vehicle navigation.

EDUCATION