LANGSTON JOHNSON

lcj36@cornell.edu | 202-674-8804 | My Portfolio | linkedin.com/in/langston-johnson

EDUCATION

Cornell University Ithaca, NY
Bachelor of Science - Mechanical Engineering May 2027
GPA: 3.88
Relevant Coursework: Engineering Materials, Heat Transfer, Spacecraft Systems and Architecture

TECHNICAL SKILLS

Software: SolidWorks, Fusion 360, Ansys, Git, Python, C#, SQL
Electrical: PCB Design, Soldering (SMD/THT), Embedded Systems
Mechanical: CNC Machining, Mill & Lathe Operation, 3D Modeling, Mass Properties
Manufacturing: SAP Manufacturing Execution System (MES)

EXPERIENCE:

Amazon – Project Kuiper | Mission Management Intern June 2025 - September 2025
Mission Management Intern

- Reviewed the mechanical and financial feasibility of Aerospace Hardware Contracts.
- Developed SQL queries to track the live status of hardware processing, integration, and open non-conformances using Manufacturing Execution Data.
- Created a Secure Dashboard to enable secure access to Processing Facility Operations data.

Cornell Rocketry Team | *Solidworks, Ansys, Machining* September 2024 – Present
Structures Subteam

- Modeled Launch Vehicle using flight data to predict performance of Airbrakes subsonic and transonic regime and inform design parameters.
- Structural Ansys testing of drag inducing elements under loads predicted from the model.
- Designed integration bulkheads and motor retaining rings for CNC machining.
- Created mass properties documentation and BOM for the system in preparation for fabrication.

Alpha Mission, Cornell University | *Embedded Software, Antennae Tuning* August 2023 – Present
High Altitude Balloon - Integration and Testing

- Developed electrical and software systems for the high-altitude balloon deployment.
- Programmed test scripts for all flight board systems.
- Wrote technical procedural documentation for requirement verification.
- Designed and tested LORA and GPS Dipoles for Solar-Sail-mounted Chips.
- Performed final integration procedures for the release mechanism of world's first free flying light sail.

Learn more at my Engineering Portfolio

AWARDS

Dean Archer Undergraduate Research Award June 2024

- Assembled and tested the flight board circuit's power system, microcontroller, sensors, and actuators—led software development of embedded flight code for sensor data monitoring, control tasks, and data downlinks.

Patti Grace Smith Fellow - Class of 2025 October 2024

- The award-winning program provides extraordinary undergraduates with their first work experience in the aerospace industry. Was selected for the class of 2025.