

NASA Research & Flight Projects

Anika Noor | Bioengineering | Embedded Systems | Scientific Research



Two hands-on NASA/Colorado Space Grant experiences: high-altitude biological research and sounding-rocket instrumentation.

High-Altitude Cyanobacteria Research

The Highest Common Factor: Impacts of the High-Altitude Environment on Cyanobacteria



Investigated how a high-altitude environment affected cyanobacteria. The project combined biological sample preparation with a balloon-borne experiment and post-flight data analysis. The payload was carried to approximately 10,000 ft.

My contributions	Technical focus
Cyanobacteria culture and laboratory work Arduino-related work Post-flight data analysis	Experimental research High-altitude payload testing Data acquisition and analysis

Recognition: Presented at the 2016 NASA Colorado Space Grant Consortium Undergraduate Research Symposium.

RockOn! Sounding Rocket Instrumentation

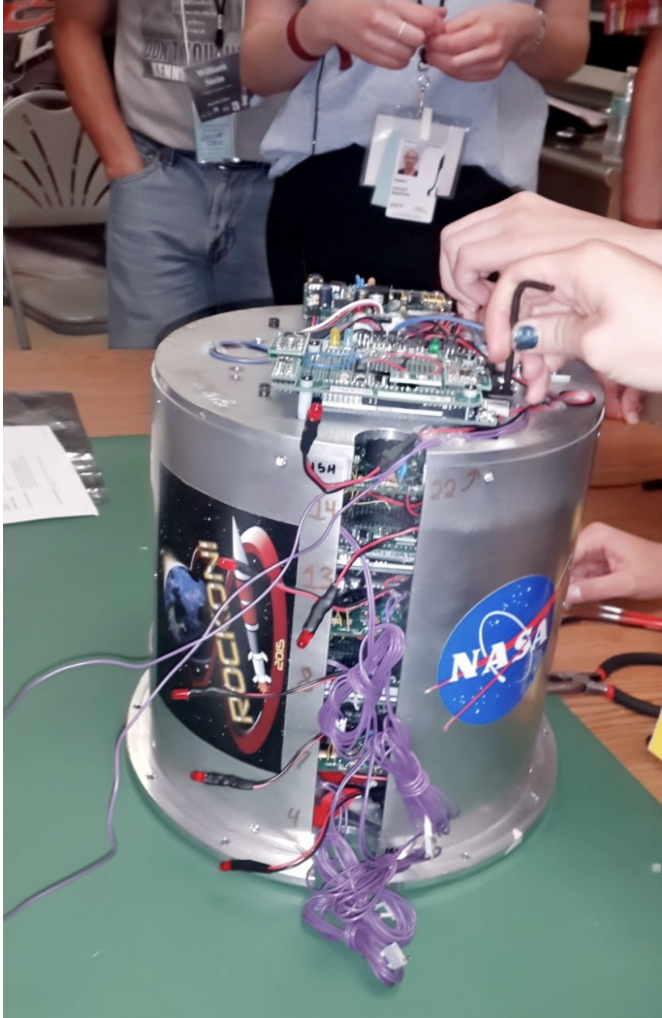
NASA Wallops Flight Facility | 2016



Participated in the NASA/Colorado Space Grant RockOn! program, developing flight instrumentation for a suborbital sounding-rocket payload. The student experiments launched aboard a Terrier-Improved Orion sounding rocket from NASA Wallops Flight Facility.

Technical contributions: [C programming](#) | [Arduino](#) | [MATLAB](#) | [instrumentation](#) | [post-flight data analysis](#)

From Hardware Build to Flight



The RockOn! experience connected embedded electronics and scientific instrumentation with an actual flight environment. NASA records confirm that the June 24, 2016 RockOn/RockSat-C mission launched student experiments from Wallops and reached approximately 74 miles altitude before payload recovery.

Engineering story: build and integrate instrumentation -> launch aboard a sounding rocket -> recover the payload -> analyze flight data.

Selected public references: NASA RockOn/RockSat program information; NASA's June 24, 2016 Wallops launch record; NASA Colorado Space Grant Consortium 2016 symposium archive.