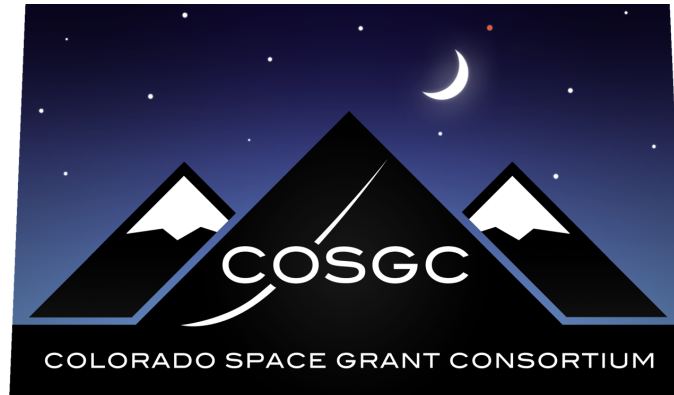


Colorado Space Grant Consortium

Student Positions – Spring 2023

STEAM software applications open until filled, applications will be reviewed every Friday

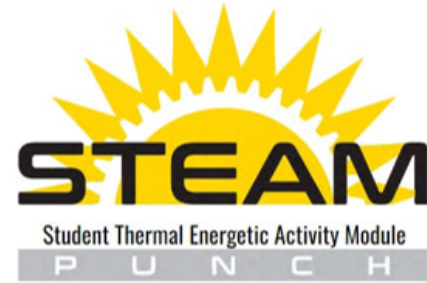


Spring 2023 Positions

1. STEAM - 1 Software (page 2)

STEAM

Project Description: The Student Thermal Energetic Activity Model (STEAM) is a multi-year experiment in collaboration with the Southwest Research Institute (SwRI) to search for signatures of nanoflares and open-field transient release of the solar wind, as well as reconnection based coronal heating mechanisms from the Sun in soft and hard x-ray. The experiment is going on one of four satellites that is part of a SMall EXplorer (SMEX) class mission, PUNCH. The instrument delivery is May 2023 and the planned mission launch is 2024.




PUNCH website: <https://punch.space.swri.edu/>

STEAM website: <https://spacegrant.colorado.edu/boulderstudents/boulderprojects/steam>

Any recommended skills not already known can be learned through employment.

Job Title: Avionics Software Team Member	Position #: ST01
Project: STEAM	Available Positions: 1-2
<p>Description:</p> <p>The STEAM Avionics subteam is responsible for developing the electrical and software interfaces with the off the shelf x-ray spectrometer that will be used on STEAM. Students on this team will also investigate and help develop the electrical interfaces with the primary spacecraft as well as the other systems on STEAM. Avionics members work will include hardware integration into a custom PCB design, testing and verifying hardware design choices, thermal and vibrational analysis, and embedded linux development. The position will potentially run through the summer of 2023.</p>	
<p>Minimum Requirements:</p> <ul style="list-style-type: none"> • Have previous project experience (Space Grant, Class Projects, etc) • Experience programming and testing microcontrollers, computers • Solid foundation of C or related coding language • Familiarity with Serial Interfaces: RS-232, RS-422, UART, I2C • Basic experience with Embedded Linux Development - creating and running executables with various modules • Experience with serial logic analyzers, oscilloscopes, power supplies <p>Desired Skills*</p> <ul style="list-style-type: none"> • Working with code reading and writing from a buffer • Wiring and testing circuits • Soldering, breadboarding, and prototyping experience <p>*Desired skills are not required, and are understood to be developed throughout employment.</p>	
Recommended Majors: Computer Science, Electrical and Computer Engineering	
Time Commitment: 8-10 hours/week (semester) 15-20 hours/week (summer if needed)	
Type of Position: Biweekly/hourly paid: \$15/hour	
Applications open until filled, applications will be reviewed every Friday	



That concludes Spring 2023 postings. Please keep an eye out for updates as the semester progresses.