

## NSF Data Science Corps

**Solicitation:** [NSF Data Science Corps](#). From the CHIPS and Science Act, a workforce development-focused solicitation for educational institutions to develop real-world skills in data science.

**Topic:** Build a strong national data science infrastructure from the community level up, by engaging data science students in real-world projects.

This solicitation would allow Taft to develop and launch **Aerospace AI** initiatives in collaboration with industry partners– very likely the only one of its kind in California Community Colleges.

Broad areas of focus:

**1. Training in basic data science in a real-world aerospace context**, with the help of industry partners, Interorbital Systems (an aerospace company) and Infyrno LLC (a deep tech AI company). Example projects: AI for: missile defense, rocket engine predictive maintenance, evaluation of generative AI for design of aerospace components, AI-based fault detection during manufacture of aerospace components.

**2. The role of science-informed machine learning in aerospace AI.** Why and how it can be beneficial to build AI systems to understand the underlying quantitative science, and basic overview of science-informed AI engineering. Applicability of science-informed machine learning in other areas of engineering.

**3. Engagement with synergistic efforts at Taft** (e.g. NASA Bridge) and in the region.

**Overall budget:** Up to \$1.2M for a maximum of 3 years.

**Due Date:** June 21, 2024