



ACQUISITION INNOVATION
RESEARCH CENTER

Defense Data Grand Prix I

Final Technical Report

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

This final technical report summarizes Year 1 of the Defense Data Grand Prix (DDGP). The DDGP was established in 2021 and in line with the Department of Defense's (DoD) Data Strategy aimed at (a) reduce the two largest barriers (access and knowledge of operational problems) to scaled data analytics in the DoD, (b) incentivize innovations and new perspectives to create unanticipated findings, and (c) increase awareness of Defense Acquisition System challenges, decisions, and processes.

The DDGP is an Acquisition Innovation Research Center (AIRC) competition in which faculty-led teams collaborate with government stakeholders to solve real-world problems. In the first iteration of the DDGP, *Grand Prix I*, 15 teams from seven universities competed across three semester-long Heats. The Defense Logistics Agency (DLA) was the primary operational sponsor for *Grand Prix I*. As such, DLA's Chief Data and Analytics Office orchestrated collaborations with 12 problem owners and worked to pilot the governance processes necessary for DDGP competitors to utilize Controlled Unclassified Information (CUI). *Grand Prix I* concluded in January 2023. Some of the largest barriers to getting academic researchers working with CUI include:

- (1) access to real-world problem owners;
- (2) disparate government data owners and data sharing policies;
- (3) CUI handling training;
- (4) lack of non-disclosure agreements tailored for faculty and students who are not employees of a contractor; and
- (5) lack of an NIST 800-171 compliant information system accessible by CUI-eligible researchers (who are not on contract and do not have Common Access Cards).

The *Grand Prix* included three Heats over an 18-month period (i.e., three university semesters):

- Heat 1: Describe proposed objectives and recommend approaches to data access and analytics.
- Heat 2: Demonstrate scalable access and sharing of real, transformed, or synthetic defense acquisition data.
- Heat 3: Analyze and visualize findings from defense acquisition data.

Through the first two Heats, *Grand Prix I* reduced the first four barriers. In the culminating third Heat, the U.S. Marine Corps (USMC) Aviation Department participated to pilot the use of a CUI-compliant information system hosted by Virginia Tech: the Defense Acquisition Research Collaboration and Innovation Environment (DARCIE), which enabled two teams (from Stevens Institute of Technology and George Mason University) to access USMC-provided readiness data.

The overall results illustrate the promise of the DDGP and the accomplishment of two key objectives: 1. provide data-driven analysis to inform DoD operational and policy decisions related to data and operations; and 2. allow researchers to use real-world data to tackle real-world problems in ways that integrate with academic courses and research seminars. The DDGP website can be found at: <https://acqirc.org/defense-data-grand-prix/>.

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