



The Research for Intelligence & Security Challenges (RISC) Initiative

Summer Internship for Hard Security Problems

May 31 – August 5, 2021

College Park, Maryland

The Applied Research Laboratory for Intelligence and Security (ARLIS) at the University of Maryland, College Park, is conducting a summer internship program in Research for Intelligence & Security Challenges (RISC). This is a continuation of the program with the same name from 2021. This exciting 10-week paid program will pair students with mentors from the UMD campus and the Department of Defense (DOD) and Intelligence Community (IC) communities. Participating students then have the potential opportunity to be considered for future employment with the US government, to include possible sponsorship for a security clearance.

ARLIS and RISC are seeking potential faculty mentors who would be able to supervise small teams of senior undergraduate and graduate students working in the following areas:

- **Computer Science, Information Science & Engineering:** AI/ML algorithmic development, HCI, data science, data and knowledge engineering, software engineering, systems engineering, media analysis and forensics, information systems design, GIS;
- **Mathematics and Statistics:** Data analytics, quantitative modeling, experimental design, graph analytics, data visualization;
- **Social & Behavioral Sciences:** anthropology, human geography (e.g., pattern of life and mobility modeling), cognitive/neuroscience & psychology, criminal justice, teamwork and group dynamics, communications, disinformation and misinformation;
- **Library Science:** Data curation, tagging, metadata, repositories, social media analytics;
- Additional topics may include: Measurement and evaluation of learning outcomes, environmental modeling and remote sensing, human factors, regulatory public policy.

While specific topics are in development, the missions supported are likely to include geospatial analysis, human geography, disinformation, insider risk, and critical technology protection. These projects are typically closely tied to mission areas and data sources from sponsoring U.S. government agencies. As a result, only U.S. citizens are considered for both the student population and the cadre of faculty mentors.



A rough timeline for the program, which should also clarify time expectations for faculty mentors, is as follows:

Milestone or activity	Date or time period
ARLIS selects student participants	Mid March
ARLIS collects all project ideas from agency partners	Mid March
Faculty mentors attend kickoff meeting with ARLIS to finalize projects, assign mentors and students to projects	April 1
Faculty mentors develop each project’s progress plan: milestones, products, data sources, etc. Each mentor/project will be paired with a U.S. Government point of contact to help translate the proposed problem into a discrete project doable in 10 weeks.	April 1 – May 31
Faculty mentors attend the program kickoff event.	May 31
Faculty mentors meet with students: weekly check-in and updates with teams; bi-weekly murder boards	Approximately 1 day per week, May 31 – August 5
Optional but encouraged: bi-weekly lunch seminars	May 31 – August 5
Faculty members attend student team final presentations	Week of August 1

RISC faculty mentors will dedicate approximately one day per week over the ten-week program (May 31 to August 5) to meeting with their project teams, including the program kick-off event on May 31, and the final presentations and closing events during the week of August 1. The faculty mentors are also encouraged to attend the bi-weekly lunchtime seminars with invited speakers, and up to 4 (virtual) field trips to IC partners and other points of interest.

As remuneration, ARLIS provides a month of summer salary support to involved faculty mentors. We are envisioning about 80-100 students, matched with about 25-35 faculty mentors. If you are interested but not selected for this year, it is certainly our plan to continue this program every year as long as our agency support continues.

If you are interested in participating as a faculty mentor in this program, please contact Dr. David Lovell at lovell@umd.edu.