



The Laboratory for Analytic Sciences (LAS) at North Carolina State University is pleased to announce the inaugural Summer Conference on Applied Data Science (SCADS), which will take place during eight weeks on campus in Raleigh, NC. This event will bring together expertise from academia, industry, and government in order to collaboratively address a data science challenge problem.

The overarching, multi-year challenge of SCADS is to generate tailored daily reports for knowledge workers that capture information relevant to their individual objectives and interests. These tailored daily reports, or “TLDRs,” are fairly short and aim to proactively provide individuals with information relevant to their needs, objectives, and interests. The content of a report may be drawn from any number or variety of sources. The TLDRs are auto-generated through development and application of modern AI/ML, user modeling, and information retrieval technologies and methods. The Intelligence Community manually produces a report of this nature for the U.S. President every morning, summarizing new updates of intelligence information that the President needs to know. The SCADS grand challenge is to automate and optimize such a process in order to scale from a daily report tailored to a single customer, to continually updated reports tailored to the interests of tens of thousands of individuals.

The 2022 SCADS will focus on addressing two specific issues related to this grand challenge. The first is to conceptualize what a practical TLDR could consist of in terms of content, format, user interactions, and automated analysis. The second is to investigate approaches for producing tailored summaries, updates, and highlights of information contained in a large-scale, evolving corpus of multi-modal data.

The LAS is currently recruiting researchers whose research interests intersect with problems posed by such challenges. While not an exhaustive list, this could include research in:

- Text Summarization, and Natural Language Processing, generally
- Knowledge Extraction, Representation, and Management
- User Interaction Log Analysis
- Multi-Modal (Text, Video, Audio) Information Extraction
- AutoML and Continual Learning
- Content Recommender Systems
- Automated Narrative Generation
- User Experience and User-Centered Design
- Human Computer Interaction
- Human Factors Psychology
- Human-Machine Communication
- Explainable Recommender Systems

SCADS attendees will be provided with preparatory materials prior to the event and spend the first two weeks of the event learning about the problem domain and datasets. Over the next six weeks, attendees will work on the problems most interesting to them, with collaborative work encouraged. Informal sessions or lectures will be used to present partial results or ideas.

SCADS attendees will receive support for travel and lodging, as well as a stipend for their participation in the 8-week event.

If you are interested, or would like to recommend someone who may be interested, in participating in the 2022 SCADS, please email scads-apply@ncsu.edu. If you are personally interested in attending we ask that you include a CV and short description of your interest.