

TASK # AN002-03. ANALYSIS OF TECHNICAL OPERATIONS JOB TASKS

PROJECT AT-A-GLANCE

- UNIVERSITIES: Drexel University and Purdue University
- PRINCIPAL INVESTIGATORS: Dr. Ellen J. Bass (Drexel) and Dr. Steven J. Landry (Purdue)
- POSTDOCTORAL RESEARCHER: Andrew J. Abbate (Drexel)
- STUDENT RESEARCHER: Nguyen V.-P. Nguyen (Purdue)
- INDUSTRY PARTNER: Benjamin Bell (Eduworks)

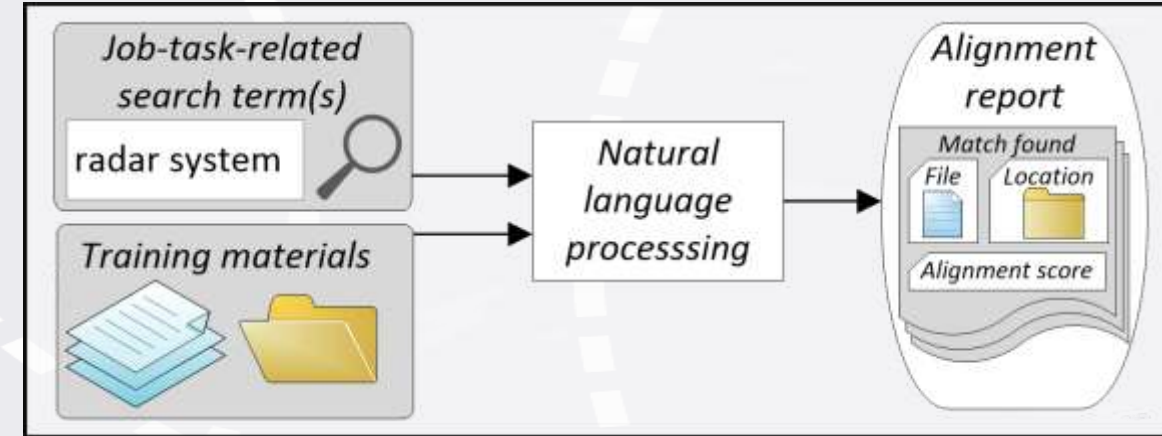
RELEVANCE TO TECHNICAL TRAINING AND HUMAN PERFORMANCE

- The training curriculum for technical operations and other mission-critical occupations includes thousands of learning objectives distributed across hundreds of courses. As the learning objectives in the curricula evolve, keeping the course materials aligned with the actual curriculum is challenging. To address this problem, this work will evaluate alignment with respect to matching text in the curriculum files and JTA task statements to help the FAA keep materials and objectives aligned.

STATEMENT OF WORK

- An analysis will be conducted to identify the state of training and training documentation for the tasks.
- The team will develop a formal definition of alignment between job tasks and training, including developing a method for determining alignment for the task and training materials of interest, using natural language processing techniques.
- The team will make recommendations for integration of current job task analysis into existing courses that have outdated or no task alignment.

TASK—TRAINING ALIGNMENT ANALYSIS APPROACH



STATUS

- The team has completed Task 1.
- The team is continuing work on Task 2.

FUTURE WORK

- The analysis will be extended to incorporate additional elements of context within the learning objectives spreadsheets, to improve conclusions about the existence or absence of alignment
- A user interface to enable the FAA to quickly identify areas where alignment does not exist is being built.

Publications, Presentations & Awards

- Publications:
- Presentations:
- Awards: