Motivation: NLP for Space Situational Awareness

Space situational awareness (SSA) is the task of monitoring the satellites and other space assets of different geopolitical entities.

SSA is normally approached as a physical measurement problem, with telescopes and other instruments pointed at the sky.

This work: Can we read text (e.g. news articles) posted on the web to help complement the information gathered using physical measurements?

Approach: SSA is a very low resource domain -- satellites are rarely launched, and events rarely happen to them. Here, we generate a corpus of SSA events using bootstrapping, then model this as a span-based information extraction task.

Extraction Rules

Sentence Identification Using Dependency Rules

Human Annotated Events

Extracted Events

Corpus Statistics

Results

Corpus Download Link

Space Situational Awareness Corpus available at: www.github.com/cognitiveailab/ssa-corpus