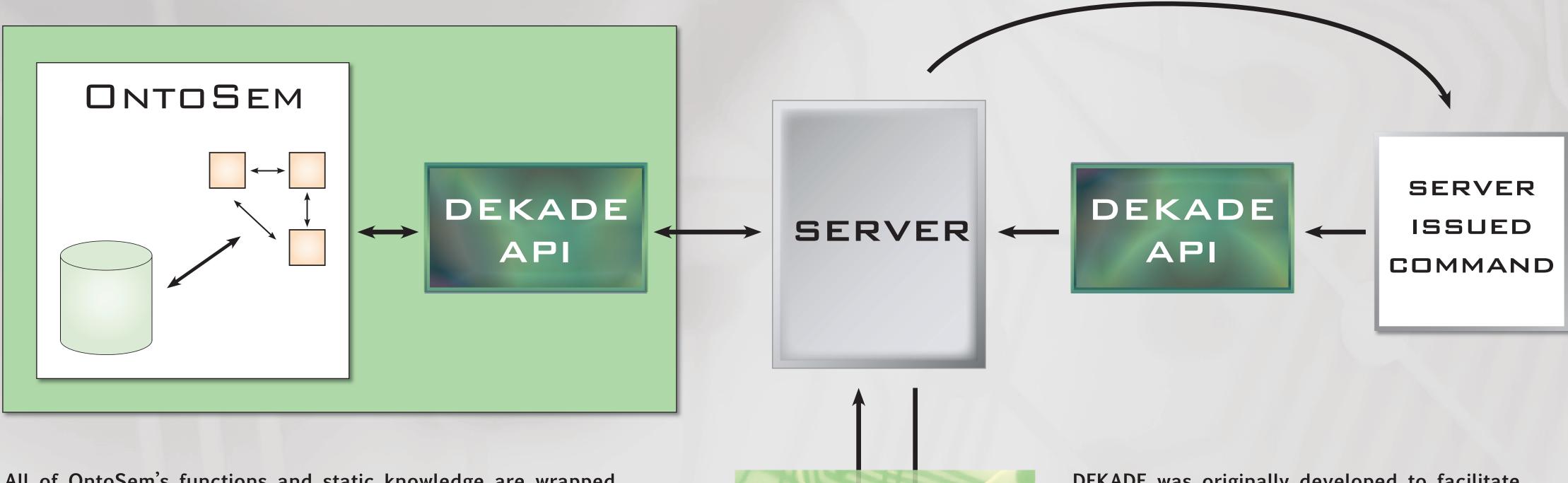
A DEVELOPMENT, EVALUATION, KNOWLEDGE ACQUISITION AND DEMONSTRATION ENVIRONMENT FOR KNOWLEDGE-BASED NLP



All of OntoSem's functions and static knowledge are wrapped in intuitive function calls and queries from the DekadeAPI. These functions can be run directly on any server supporting the OntoSem environment, or remotely through the use of the DekadeServer.

This functionality has supported the work of several research projects on campus, including the SemNews project (Java, et al. 2006), the Hobbit Project (English and Nirenburg, 2007), as well as EBIDS (Stone, 2007).

English, J., S. Nirenburg. Ontology Learning from Text Using Automatic Ontolgical-Semantic Text Annotation and the Web as the Corpus. Proceedings of the AAAI 2007 Spring Symposium Series on Machine Reading, March 2007.

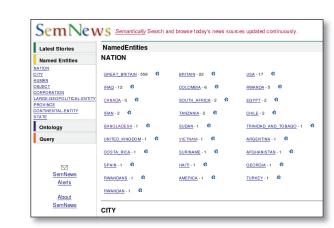
Java, A., et al. SemNews: A Semantic News Framework. In Proceedings of the Twenty-First National Conference on Artificial Intelligence (AAAI-06). 2006. Stone, A. EBIDS-SENLP: A System to Detect Social Engineering Email Using Natural Language Processing. Unpublished Master's

# APPLICATIONS USING ONTOSEM AND DEKADE

#### **SemNews**

Thesis, University of Maryland Baltimore County. 2007.

Developed by Akshay Java. A semantic analysis of RSS news feeds, and conversion to OWL.

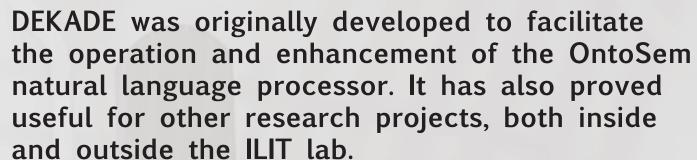


## **EBIDS**

Developed by Al Stone. A social engineering email detection system, using NLP.

## The Hobbit Project

Developed by Jesse English, Sergei Nirenburg. A machine reading / continued learning project.



The two main components of DEKADE are its API and GUI.

The API, written in Java, is an extensible collection of functions and objects which make use of the OntoSem system efficient and user-friendly.

The interface, written in Java/Swing, supports a plug-and-play environment, allowing researchers and developers to quickly add new panels to the interface, which already supports a robust editor for each of the major static knowledge resources of OntoSem, as well as a step-by-step processor of the OntoSem analyzer.

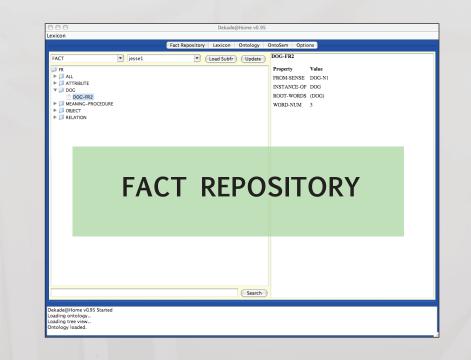


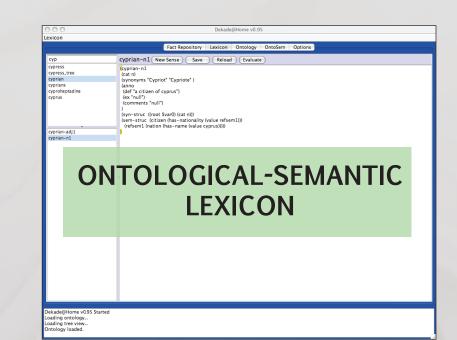
INTERNET

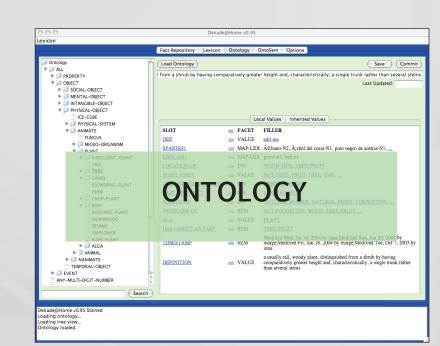
DEKADE

API

#### BROWSING AND EDITING STATIC KNOWLEDGE RESOURCES







## MONITORING AND DEBUGGING THE PROCESSES OF MEANING EXTRACTION FROM TEXT



