

**Bio:**

Dr. David Israel is the Director of the Natural Language Program in the AIC. In addition to work on Text Processing and Question Answering from texts, he has published in a number of areas of AI, including knowledge representation and reasoning, theory of meaning generally and formal semantics of natural languages, more specifically, and theory of rational action. Dr. Israel was the Chief Scientist for SRI's CALO project, which was established to generate innovative ideas that result in new science, new and fundamental approaches to current problems, and new algorithms and tools. CALO's goal is to create systems that can reason, learn from experience, be told what to do, explain what they are doing, reflect on their experience, and respond robustly to surprise. SRI led a multidisciplinary team which brought together leading researchers in AI, Machine Learning (ML), Natural Language Processing (NLP), Knowledge Representation and Reasoning (KR&R), and Human-Computer Interaction from 25 universities and companies.

Dr. Israel was also the PI of SRI's GALE project in Y1 and is currently the Co-PI of GALE. The goal of the GALE (Global Autonomous Language Exploitation) program is to develop and apply computer software technologies to absorb, translate, analyze, and interpret huge volumes of speech and text in multiple languages, eliminating the need for linguists and analysts, and automatically providing relevant, concise, actionable information to military command and personnel in a timely fashion. On GALE, SRI leads a multidisciplinary team that brings together leading researchers in Automatic Speech Recognition, Machine Translation, and NLP from more than dozen universities and companies. Dr. Israel is also Senior Scientific Advisor to SRI's Bootstrapped Learning Project, which was established to make instructable computing a reality; the "electronic student" is to learn from a human teacher who uses spoken language, gestures, demonstration, and many other methods one would find in a human mentored relationship. In this effort, SRI leads a team of researchers in ML and KR&R, from 10 universities. In addition, Dr. Israel was PI of the DARPA-funded Mobius seedling/sapling efforts, focused on building systems that can learn by reading – that is, from naturally occurring texts, can acquire consistent theories or models of a domain, rich enough to support problem-solving. SRI recently won an award in the DARPA Machine Reading Program, that resulted from these seedlings and Dr. Israel will be PI of the project, which will bring together leading researchers, from seven research institutions, in NLP, Machine Learning and Probabilistic Reasoning.