

Resource Summary Report

Generated by NIF on Aug 10, 2026

Project Halo

RRID:SCR_000136

Type: Tool

Proper Citation

Project Halo (RRID:SCR_000136)

Resource Information

URL: <http://www.projecthalo.com/>

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Description: THIS RESOURCE IS NO LONGER IN SERVICE. Documented on July 31, 2025. Project Halo is a staged, long-range research effort by Vulcan Inc. towards the development of a Digital Aristotle reasoning system capable of answering novel questions and solving advanced problems in a broad range of scientific disciplines and related human affairs. The project focuses on creating two primary functions: a tutor capable of instructing and assessing students in those subjects, and a research assistant with broad, interdisciplinary skills to help scientists and others in their work. Vulcan began work towards this ambitious vision in 2003 with the Halo Pilot a six-month effort to investigate the feasibility of creating a scientific knowledge base capable of answering novel questions from the AP (1st year college level) chemistry test. Three teams SRI International, Cycorp, and Ontoprise developed knowledge bases, for a limited section of an AP-chemistry syllabus, that were able to correctly answer 40 to 50 percent of the associated questions from the AP test. Since 2004, Project Halo has worked to improve these systems, with an emphasis on enabling knowledge entry by domain experts, instead of specialists in artificial intelligence software. In 2004, Vulcan began the development of Automated User-Centered Reasoning and Acquisition System (AURA), by SRI, that enables domain experts (graduate students in Biology, Chemistry, and Physics) to enter knowledge from introductory science textbooks. In 2006, an evaluation of AURA showed that students could create AURA knowledge bases that correctly answered 40 percent of the questions on a limited AP exam. In 2008, the next evaluation demonstrated an improvement of that score to 70 percent correct. In parallel, Project Halo has sponsored Ontoprise to develop semantic extensions to MediaWiki, the software that Wikipedia runs on. Ontoprise has developed a set of Semantic MediaWiki (SMW)+ extensions to MediaWiki that provide a community-based environment for authoring ontologies and creating semantically enhanced wikis. SMW+ has been widely used and is being applied in project management, enterprise collaboration and knowledge management, business intelligence, and the management of large terminology sets. In 2007, Vulcan began a new effort, Halo Advanced Research (HaAR), to address the difficult knowledge representation

and reasoning (KR) challenges that prevent the realization of Digital Aristotle. This effort has produced a new semantic rule language and reasoning system, Semantic Inferencing on Large Knowledge (SILK), which includes major advances, including for default and higher-order reasoning over the web.

Abbreviations: Project Halo

Resource Type: organization portal, portal, data or information resource

Keywords: project, tutor, research assistant, science, knowledge-base, semantic mediawiki, ontology, textbook, book, training material, digital book, data mining, biology

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: Project Halo

Resource ID: SCR_000136

Alternate IDs: nlx_144483

Record Creation Time: 20220129T080159+0000

Record Last Update: 20260810T040254+0000

Ratings and Alerts

No rating or validation information has been found for Project Halo.

No alerts have been found for Project Halo.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Lavin Y, et al. (2017) Innate Immune Landscape in Early Lung Adenocarcinoma by Paired Single-Cell Analyses. Cell, 169(4), 750.