

# Mark R. Ressler, Ph.D.

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## Overview

Dual background in academic Philosophy and professional Information Technology, leading to interest in Formal Ontology with application to knowledge management and exploitation of knowledge structures in machine learning and other formal systems.

## Education

Ph.D. in Philosophy, The University of Melbourne, 2009

Dissertation: “The Logic of Relative Systems”

Supervisor: Graham Priest

Cited by Kölbel, M. (2011). “Global Relativism and Self-Refutation”. In S. D. Hales (Ed.), *A Companion to Relativism* (pp. 11-30). Malden, MA: Wiley-Blackwell.

M.A. in Philosophy, The University of Iowa, 2006

Master’s Degree by Examination

M.A. in Philosophy, San Diego State University, 2003

Thesis: “Connectionism and the Intentionality of the Programmer”

Supervisor: Robert Francescotti

B.A. in Liberal Arts, St. John’s College, Annapolis, MD, 1989

## Professional Experience

Team Member, ACTICI, Los Alamos National Laboratory, 2018–2019

Developed strategy and prototype to perform automated categorization of potentially classified texts on the basis of explicit classification guidance

Developed algorithms to bootstrap classification guidance from natural language descriptions using semantic enrichment from thesauri and ontologies

Researched machine learning techniques to increase accuracy of initial detection as part of process for continuous improvement

Postdoctoral Research Fellow, The University at Buffalo, 2011–2012

Studied Formal Ontology with Barry Smith

Led working group on First Order Predicate Logic version of Basic Formal Ontology (BFO), partially published in Arp, Smith, and Spear, *Building Ontologies with Basic Formal Ontology*

Visiting Scholar, The University of Pittsburgh, 2009–2011

Post-doctoral research on Relativism and Philosophical Methodology

## Teaching Experience

Adjunct Professor, Philosophy, University of New Mexico, Los Alamos, 2015–2017

Teaching Assistant, Philosophy, The University of Iowa, 2005–2006

## Publications

“Thoroughly Relativistic Perspectives”, *Notre Dame Journal of Formal Logic*, Volume 53, Number 1 (2012), 89–112.

## Self-Publications

*The Logic of Relativism*, Increasingly Skeptical Publications, 2013.

## Presentations

“Perspectival Methods in Metaphysics”, Fifth Interdisciplinary Ontology Meeting, Keio University, Tokyo, Japan, February 24, 2012. Invited paper.

“Defining Relativism”, 2008 Annual Conference of the Australasian Association of Philosophy, July 9, 2008.

## Awards and Fellowships

Endeavour International Postgraduate Research Scholarship, The University of Melbourne, 2007–2010

Melbourne International Research Scholarship, The University of Melbourne, 2007–2010

Graduate Fellowship, The University of Iowa, 2004–2005

## Other Professional Experience

Information Technology: Data Architect and Modeler, Computer Programmer, and Project Manager, 1989–2006, 2013–present

## Technical Skills

*Programming:* Python, Perl, Unix Shell Scripting, SQL

*Libraries and Toolkits:* Gensim, spaCy, NLTK, scikit-learn, SciPy, Flask

*Web Development:* OWL, RDF, XML, XSLT, HTML, CSS, PHP, Javascript

*Data Modeling and Ontology:* Protégé Editor, TopBraid Composer, ERWin, ER/Studio

*Databases:* Oracle, DB2, SQL Server, MySQL, PostgreSQL

## **Language Skills**

Ancient Greek (reading only)

French (reading only)