

James A. Overton
Apt. 1 - 105 Quebec Ave.
Toronto, Ontario, Canada
M6P 2T3

Citizenship: Canadian

Languages: English (mother tongue), French (reading knowledge)

November 8, 2016
1 (647) 478-9327
james@overton.ca

Current Occupation

My company Knocean Inc. offers consulting and development services at the intersection of philosophy, science, and software. I specialize in scientific database integration using biomedical ontologies. Examples include ontology development and deployment, building semantic web tools, and developing custom web applications for scientific and medical projects.

Education

• Degrees

- **Doctor of Philosophy.** The University of Western Ontario 2007 - 2012. Thesis: “Explanation in *Science*”
- **Bachelor of Mathematics (Honours)**, with Highest Honours. Carleton University 2004 - 2005. Thesis: “Categories and their Algebra”
- **Master of Arts in Philosophy**, with Distinction. Carleton University 2002 - 2004. Thesis: “Toward a Foundation for Interdisciplinary Science: A Model of Special Sciences and Levels of Complexity.”
- **Bachelor of Humanities (Honours)**, with Highest Honours and a Specialization in English Literature. Carleton University 1998 - 2002.

• Grants, Awards, and Scholarships

- Cesare Romagnoli, Gillian Barker, and James A. Overton. “The Ontology and Epistemology of Medical Imaging.” Joseph L. Rotman Institute of Science and Values Graduate Research Assistantship, April 2014.
- Cesare Romagnoli and James A. Overton. “Structured Reporting of Prostate Cancer.” Image Guidance for Prostate Cancer Management Project Grant, January 2012.
- Visiting Fellowship at the Tilburg Center for Logic and Philosophy of Science (TiLPS), 2011.
- Gillian Barker, Cesare Romagnoli, and James A. Overton. “The Interdisciplinary Prostate Ontology Project – Stage Two.” Joseph L. Rotman Institute of Science and Values Seed Grant, July 2009.
- Cesare Romagnoli and James A. Overton. “The Interdisciplinary Prostate Ontology Project.” London Health Sciences Centre Department of Medical Imaging Project Grant, September 2008.
- Canada Graduate Scholarships – Michael Smith Foreign Study Supplement, Social Sciences and Humanities Research Council of Canada (\$6000), 2009.
- Canada Graduate Scholarships – Doctoral Award, Social Sciences and Humanities Research Council of Canada (\$105 000 over 3 years), 2007-2010.
- The University of Western Ontario Department of Philosophy Entrance Scholarship (\$4000), 2007.
- University Medal in Mathematics, Carleton University, 2005.
- Doctoral Fellowship, Social Sciences and Humanities Research Council of Canada (\$80 000 over 4 years, declined to pursue employment), 2005.
- Ontario Graduate Scholarships (\$15 000 each, awarded twice), 2002-2003, 2003-2004.

- Carleton University Dean of Graduate Studies Entrance Scholarship for Academic Excellence (\$2000), 2002.
- Carleton University Senate Medal for Outstanding Academic Achievement, 2002.
- Carleton University Deans' Honour List, 1999-2002, 2004 (all years of eligibility).
- Carleton University Entrance Scholarship (\$3200 per annum, renewed three times), 1998-2002.

Research Interests

Scientific explanation and science informatics are at the centre of my research. Scientific explanations help us to understand our world better. Science informatics multiplies the power and reach of science by helping us to collect, manage, and analyze vast quantities of data. More data and more analytical power mean that we explain more, but also that we explain differently. I use tools from epistemology, ontology, mathematics, and computer science to better understand the changing nature of scientific explanation and build better science informatics systems.

Work History

- **Owner** 2016 - Present
Knocean Inc. Toronto, Ontario, Canada
 - consulting and development services at the intersection of philosophy, science, and software
- **Owner** 2012 - 2016
Knocean Toronto, Ontario, Canada
 - consulting and development services at the intersection of philosophy, science, and software
- **Consultant** 2012 - Present
La Jolla Institute for Allergy and Immunology San Diego, California, USA
 - ontology development, software development, and database integration for the Immune Epitope Database
- **Consultant** 2012 - Present
Vistrionix, Inc. Reston, Virginia, USA
 - ontology development, software development, and database integration for the Chemical Effects on Biological Systems project
- **Technical Working Group Member** 2014 - Present
OBO Operations Committee
 - collaborative development of policies and tools for the maintenance of the OBO Foundry
- **Release Manager** 2014 - Present
Ontology for Biomedical Investigations <http://obi-ontology.org>
 - development and coordination of OBI review and release processes, and supporting tools
- **Consultant** 2015, 2016
Lawrence Berkeley National Laboratory Berkeley, California, USA

- design, development, and maintenance of several web sites, using tools such as Perl, MySQL, Flash, and Photoshop
- development of WAP and WML based cell phone applications

- **Contractor** Periodic between Summer 1999 and Summer 2003
G.C. Piano Company Toronto, Ontario, Canada
 - manufacture of custom piano bass strings

Skills

Programming Languages and Software: Expertise with: Clojure, Java, ClojureScript, JavaScript, CoffeeScript, X/HTML, CSS; Semantic Web tools such as RDF, SPARQL, OWL, Protégé; XML tools such as XSLT, XPath, RelaxNG, native XML databases, XQuery; Mozilla technologies such as XUL and XBL. Broad experience with web browsers, web standards, cross-platform and accessibility issues. Good knowledge of Python, SQL, and L^AT_EX. Working knowledge of Haskell, Ruby, PHP, Perl, C/C++; Unix shell scripting and standard utilities; version control with CVS, SVN, Git, and Mercurial; XUnit software testing; continuous deployment methods; Amazon Web Services, particularly EC2. Experience with software packages such as the Apache and nginx web servers, Adobe Photoshop and Illustrator, Microsoft Office, OpenOffice, Maple and Matlab.

Operating Systems: MacOS X, Linux, Windows.

General: My academic training has given me strong qualitative and quantitative analytic skills, as well as self-discipline and self-motivation. Work experience has taught me to balance theory with pragmatism about project constraints. My management of an open source project demonstrates good interpersonal skills and dedication. I have strong written and verbal communication skills, and I am both enthusiastic and a quick learner.