

# Maulik Rajendra Kamdar

(650) 285-8748 · maulikrk@stanford.edu · <http://www.maulik-kamdar.com>

---

## Education

---

**Stanford University, California** 2014–current  
*Doctor of Philosophy (Ph.D.)*  
Biomedical Informatics Training Program

**Indian Institute of Technology (IIT), Kharagpur** 2007–2012  
*Bachelor of Technology (B.Tech. Honors) and Master of Technology (M.Tech.)*  
Biotechnology and Biochemical Engineering

---

## Work Experience

---

**Center for Biomedical Informatics Research, Stanford University** 2014–current  
*Graduate Research Assistant*

- Develop methods that facilitate biomedical researchers to retrieve and explore data and knowledge from multiple, heterogeneous sources, through federated querying.
- Collaborated with Samsung Research to develop an application using the Samsung Galaxy 2 smart watch wearables, for the passive monitoring of moods and emotions.
- Analyze how users explore, query and reuse concept terms in biomedical ontologies, and develop visualization tools to summarize interaction patterns. ([onto-apps.stanford.edu](http://onto-apps.stanford.edu)).
- Developed the Ebola Virus knowledgebase ([ebola.semanticscience.org](http://ebola.semanticscience.org)) and visualization dashboard by aggregating data on genes, proteins, domains, ligands, pathways and publications.

**Digital Enterprise Research Institute, NUI Galway** 2012–2014  
*Linked Data Researcher*

- Contributed to the Ireland Open Data Initiative through a data audit of open Irish public sector datasets and developed the Data.Gov.IE platform for facilitating search and access.
- Involved in Linked Cancer Genome Atlas ([tcga.deri.ie](http://tcga.deri.ie)) project to develop an analytics platform that integrates GWAS, pathways and publications knowledge with the cancer patient datasets.
- Involved in the European FP7 Granatum Project ([granatum.org](http://granatum.org)) to develop a knowledge-driven federated query platform for interactive search and visualization of biomedical data from multiple sources.

**Google Inc., California** 2010–2012  
*Summer of Code Researcher*

- Contributed to Reactome Project ([reactome.org](http://reactome.org)) to develop the Reactome Pathway Browser and the Pathway Summary Visualizer, for aggregative visualization and interactive exploration of biological pathways.
- Contributed to Drupal ([drupal.org](http://drupal.org)), an open-source content management platform, to develop a module that extends HTML5 support in the platform and visualizes statistical data.

---

## Honours and Awards

---

**Best Poster Award** (*Graphics*) - Stanford Biomedical Informatics Training Program Retreat 2016  
**NIH/NLM Travel Award** - 21st Pacific Symposium on Biocomputing 2016  
**Best Poster Award** (*Graphics*) - Stanford Biomedical Informatics Training Program Retreat 2015  
**Best Paper Award** - 7th Conference on Semantics in Healthcare and Life Sciences 2014  
**Semantic Web Challenge Award** (*Big Data Prize*) - 12th International Semantic Web Conference 2013  
**Best Project Award** - 10th Summer School on Ontology Engineering and the Semantic Web 2013  
**Best Poster Award** - 10th Summer School on Ontology Engineering and the Semantic Web 2013  
**Google Summer of Code** (*Pathway Summary Visualization*) - Genome Informatics 2012  
**Honourable Mention in Technology** - Indian Institute of Technology, Kharagpur 2012  
**Best Outgoing Student** (*Technology*) - Meghnad Saha Hall of Residence, IIT Kharagpur 2012  
**Google Summer of Code** (*HTML5 Canvas Pathway Visualization*) - Genome Informatics 2011  
**Google Summer of Code** (*HTML5 Support to Drupal 7*) - Drupal 2010  
**All India Rank 2737** (*Top 1% of total applicants*) - IIT Joint Entrance Examination 2007  
**Xavierite Super Award** - St. Xavier's High School, Ahmedabad 2007

---

## Selected Peer-reviewed Publications

---

1. Maulik R. Kamdar and Mark A. Musen. **Mechanism-Based Pharmacovigilance Over the Life Sciences Linked Open Data Cloud**. *American Medical Informatics Association Annual Symposium*, November 2017 (accepted - upcoming).
2. Maulik R. Kamdar, Simon Walk, Tania Tudorache and Mark A. Musen. **BiOnIC: A Catalog of User Interactions with Biomedical Ontologies**. *16th International Semantic Web Conference (Resources Track)*, October 2017 (accepted - upcoming).
3. Maulik R. Kamdar and Mark A. Musen. **PhLeGrA: Graph Analytics in Pharmacology over the Web of Life Sciences Linked Open Data**. *26th World Wide Web Conference*, April 2017.
4. Maulik R. Kamdar, Tania Tudorache and Mark A. Musen. **A Systematic Analysis of Term Reuse and Term Overlap across Biomedical Ontologies**. *Semantic Web – Interoperability, Usability, Applicability*, June 2017.
5. Maulik R. Kamdar and Michelle J. Wu. **PRISM: A Data-driven Platform for Monitoring Mental Health**. *21st Pacific Symposium on Biocomputing*, January 2016.
6. Maulik R. Kamdar, Tania Tudorache and Mark A. Musen. **Investigating Term Reuse and Overlap in Biomedical Ontologies**. *6th International Conference on Biomedical Ontology*, July 2015
7. Maulik R. Kamdar and Michel Dumontier. **An Ebola Virus-centered Knowledge Base**. *Database: The Journal of Biological Databases and Curation*, April 2015.
8. Maulik R. Kamdar, Aftab Iqbal, Muhammad Saleem, Helena F. Deus and Stefan Decker. **GenomeSnip: Fragmenting the Genomic Wheel to augment discovery in cancer research**. *7th Conference on Semantics in Healthcare and Life Sciences*, February 2014. **BEST PAPER AWARD**.
9. Maulik R. Kamdar, Dimitris Zeginis, Ali Hasnain, Stefan Decker and Helena F. Deus. **ReVeaLD: A User-driven Domain-specific Interactive Search Platform for Biomedical Research**. *Journal of Biomedical Informatics*, February 2014.

---

## Other Peer-reviewed Publications

---

10. Ali Hasnain, S Sana E Zainab, Maulik R. Kamdar, et al. **A Roadmap for navigating the Life Sciences Linked Open Data Cloud**. *4th Joint International Semantic Technology*, November 2014.
11. Muhammad Saleem, Maulik R. Kamdar, et al. **Big Linked Cancer Data: Integrating Linked TCGA and PubMed**. *Web Semantics: Science, Services and Agents on the WWW*, October 2014.
12. Laleh Kazemzadeh, Maulik R. Kamdar, et al. **LinkedPPI: Enabling Intuitive, Integrative Protein-Protein Interaction Discovery**. *4th Workshop on Linked Science, ISWC*, October 2014.
13. Ali Hasnain, Maulik R. Kamdar, et al. **Linked Biomedical Dataspace: Lessons Learned integrating Data for Drug Discovery**. *13th International Semantic Web Conference*, October 2014.
14. Prabuddha Dey, Monami Chakraborty, Maulik R. Kamdar, et al. **Functional characterization of two structurally novel diacylglycerol acyltransferase2 isozymes responsible for the enhanced production of stearate-rich storage lipid in *Candida tropicalis* SY005**. *PLOS ONE*, April 2014.
15. David Croft, Antonio Fabregat Mundo, Robin Haw, Marija Milacic, Joel Weiser, Guanming Wu, Michael Caudy, Phani Garapati, Marc Gillespie, Maulik R. Kamdar, et al. **The Reactome Pathway Knowledgebase**. *Nucleic Acids Research (Database Issue)*, January 2014.
16. Muhammad Saleem, Maulik R. Kamdar, et al. **Fostering Serendipity through Big Linked Data**. *Semantic Web Challenge at the 12th International Semantic Web Conference*, October 2013. **BIG DATA AWARD**.
17. Prabuddha Dey, Maulik R. Kamdar, et al. **Identification of an extracellular antifungal protein from the endophytic fungus *Colletotrichum* DM06**. *Protein and Peptide Letters*, February 2013.

---

## Posters and Technical Reports

---

1. Maulik R. Kamdar and Mark Musen. **Mining the Life Sciences Linked Open Data Cloud: An Application to Discover Drug-Adverse Reaction Associations.** *BMI Retreat*, September 2016. **BEST POSTER AWARD.**
2. Maulik R. Kamdar and Mark Musen. **Mining the Life Sciences Linked Open Data Cloud for Drug-Adverse Reaction Association Discovery.** *GRC Advanced Health Informatics*, July 2016.
3. Lichy Han, Maulik Kamdar and Daniel Kim. **Predicting Transcription Factor Complexes Using Similarities in Genomic Motifs.** *Big Data in Biomedicine Conference*, May 2016.
4. Maulik R. Kamdar, Tania Tudorache and Mark A. Musen. **Extracting Similar Flavors in the Spaghetti of Biomedical Ontologies.** *BMI Retreat*, September 2015. **BEST POSTER AWARD.**
5. Lichy Han, Winn Haynes, Maulik Kamdar and Alejandro Schuler. **Bioinformatics Search.** *Big Data in Biomedicine Conference*, May 2015.
6. Maulik R. Kamdar and Michel Dumontier. **An Ebola-centered Knowledge Base.** *Bio-X Interdisciplinary Initiatives Seed Grant Symposium*, February 2015.
7. Richard Cyganiak, Maulik R. Kamdar, et al. **Open Data Ireland: Data Audit Report.** *Open Data Ireland Project*, June 2014
8. Maulik R. Kamdar, et al. **ReVeaLD: A user-driven domain-specific interactive search platform for biomedical research.** *10th Summer School on Ontology Engineering and the Semantic Web*, July 2013. **BEST POSTER AWARD.**

---

## Service

---

<b>Web Developer</b> , Goggles Optional, Stanford University	2015–current
<b>Organizing Committee Member</b> , Biomedical Computation @ Stanford (BCATS)	2015–2016
<b>Technical Reviewer</b> , WebGL Game Development, Packt Publishing	2013–2014
<b>Technology Head</b> , Meghnad Saha Hall of Residence, IIT Kharagpur	2010–2012
<b>Vice President</b> , Association of Biotechnologists, IIT Kharagpur	2010–2011
<b>Web Team Developer</b> , Kshitij - IIT Kharagpur Techno-Management Symposium	2008–2010