

MAYANK KEJRIWAL

4676 Admiralty Way, Ste. 1001, Marina Del Rey, CA 90292 | 1-217-819-6696 | kejriwal@isi.edu | kejriwalresearch.azurewebsites.net | <https://www.linkedin.com/in/mayankkejriwal/> | <https://github.com/mayankkejriwal> | https://twitter.com/kejriwal_mayank

CURRENT POSITION

Computer Scientist

Information Sciences Institute

Since June 2016

Research Assistant Professor

Industrial and Systems Engineering

University of Southern California (USC) Viterbi School of Engineering

Since April 2018

EDUCATION

University of Texas at Austin

M.Sc. and Ph.D. in Computer Science

Aug. 2012-May 2016

Current G.P.A: 3.83

Ph.D. thesis: *Populating a Linked Data Entity Name System*

Recipient of SWSA Best Dissertation Award

Adviser: Daniel P. Miranker

Key Courses: Natural Language Processing, Information Retrieval, Neural Networks, Semantic Web, Algorithms, Graphical Models

University of London External Programmes (Lead School: *London School of Economics*)

B.Sc. in Banking and Finance, Upper Second Class Honors

Aug. 2013-Aug. 2015

Key Courses: Principles of Banking and Finance, Principles of Accounting, Valuation and Securities Analysis, Elements of Econometrics, Financial Intermediation, Investment Management, Corporate Finance

University of Illinois at Urbana-Champaign

B.Sc. in Computer Engineering, Highest Honors

Aug. 2009-Aug. 2012

Graduation G.P.A: 3.89

Honors thesis: *Machine Learning Techniques in Offline Handwriting Transcription*

Advisers: P. S. Carney and Kenton McHenry

Upper-level Courses: Artificial Intelligence, Scientific Computation, Machine Learning, Computer Graphics, Theory of Computation, Computer Organization and Design, Digital Systems Laboratory, Analog Signal Processing, Solid State Electronic Devices, Computer Systems Engineering, Senior Research Project, Applied Linear Algebra, Probability with Engineering Applications, Differential Equations, Calculus III, Quantum Physics I, Classical Mechanics I and II, Electromagnetic Fields, Thermal and Statistical Physics, Classical Physics Lab

National University of Singapore

Study Abroad

Jan. 2012-May 2012

Key Courses: Introduction to Economics, Introduction to Japanese Studies, and Japan in the 20th Century

CURRENT PROJECTS

GAIA: Generating Alternatives for Interpretation and Analysis

Jan. 2018-Current

Funded under DARPA Active Interpretation of Disparate Alternatives (AIDA)

Key Responsibilities: Building on expertise in knowledge graphs and Entity Resolution to process, refine, link and reason over outputs of upstream multi-modal information extraction systems.

SAGE: Synergistic Anticipation of Geopolitical Events

Aug. 2017-Current

Funded under IARPA Hybrid Forecasting Competition (HFC)

Key Responsibilities: Building an advanced forecasting platform, both for research and actual use, that uses natural language processing and data mining to assist experts and forecasters in making informed predictions about geopolitical events.

ELICIT: A System for Extracting and Organizing Causal Information

Aug. 2017-Current

Funded under DARPA Causal Exploration of Complex Operational Environments (CauseEx)

Key Responsibilities: Semi-automatically modeling and discovering causal factors, and performing entity resolution across nodes of a heterogeneous knowledge graph constructed from structured, semi-structured and unstructured data sources.

DSBox: Data Scientist in a Box

March 2017-Current

Funded under DARPA Data-driven Discovery of Models (D3M)

Key Responsibilities: Performing research and development on, and building, an automated sequence modeling-based pipeline to minimize data cleaning effort by data scientists in the field.

THOR: Text-enabled Humanitarian Operations in Real-time

June 2016-Current

Funded under DARPA Low Resource Languages for Emergent Incidents (LORELEI)

Key Responsibilities: Building robust entity linking and network analysis systems to provide situational awareness to customers in the humanitarian assistance and disaster relief (HADR) domain.

DIG: Domain-specific Insight Graphs

June 2016-April 2018

Funded under DARPA MEMEX

Key Responsibilities: Researching and developing robust information extraction, search, link prediction and entity resolution algorithms to assist investigators and law enforcement in complex domains such as human trafficking and securities fraud.

SCHOLARSHIPS, AWARDS AND TRAVEL GRANTS

AI2 Key Scientific Challenge Winner	2017
Semantic Web Science Association (SWSA) Best Dissertation Award	2017
Amazon Cloud Credits for Research Grant	2017
Microsoft Azure for Research Grant	2017
AAAI Doctoral Consortium Travel Award	2015
Microsoft Azure for Research Grant	2014
National Science Foundation Travel Grant	2014
Department Nominee: Microsoft, Google fellowships	2013
Department Travel Grant	2013
MCD Fellowship	2012-2014
Daniel and Carol Dobberpuhl Award	2012
Senior 100 Honorary	2012
Henry O. Koehler Scholarship	2011
Chancellor's Scholar	2010-2012
Edmund J. James Scholar	2009-2012
Dean's List	2009-2012

TEACHING

University of Southern California	
Lecturer	Aug. 2016-Dec. 2016
<i>CSCI 548: Information Integration (Fall 2016)</i>	
University of Texas at Austin	
Teaching Assistant	Aug. 2012-June 2014
<i>Contemporary Issues in Computer Science (Spring 2014)</i>	
<i>Automata Theory (Spring 2013)</i>	
<i>Data Management (Falls 2013, 2012)</i>	
<i>Artificial Intelligence (Fall 2012)</i>	

EXPERIENCE

Information Sciences Institute, USC	
Computer Scientist	June 2016-Current
<i>Information Integration group</i>	
Information Sciences Institute, USC	
AI Seminar Coordinator	Jan. 2017-Jan. 2018
<i>Information Integration group</i>	
Capsenta, Inc.	
Semantic Web Consultant	May 2016-June 2016
<i>Worked on integrating advanced ontology matching solutions in the company's current products</i>	
University of Texas at Austin	
Graduate Research Assistant	June 2014-May 2016
<i>Research group of Daniel P. Miranker</i>	

CareerBuilder LLC, Norcross, Georgia

Data Scientist Intern

May 2015-Aug. 2015

Worked in the R&D team on the Recruitment Edge and Company Normalization products

Rackspace, the Open Cloud Company, San Antonio, Texas

Summer Intern

May 2013-July 2013

Worked on the Big Data team helping with a new Hadoop-based product roll-out

National Center for Supercomputing Applications, Urbana, Illinois

Undergraduate Research Intern

May 2011-Aug. 2011

Developed scalable machine learning techniques to automate digital handwriting transcription of terabyte-level US census data

University of Illinois at Urbana-Champaign

Camp Counselor

May 2010-Aug. 2010

Designed STEM exercises for high-school students, and supervised them thereof

University of Illinois at Urbana-Champaign

Freshman Research Intern

May 2010-Aug. 2010

Helped to automate biomedical image processing tasks using the ImageJ software tool

SKILLS

- **Specialties** – Information Integration, Natural Language Processing, Semantic Web, Data Mining, Machine Learning
- **Languages**– Python , Java, C/C++, MATLAB, SQL, SPARQL, Latex
- **Systems, Tools and Packages**– PyCharm, Amazon Web Services, SciKit Learn, t-SNE, NetworkX, TensorFlow, Microsoft Azure, Eclipse IDE, Weka, LibSVM, SecondString, FEBRL, Lucene, Mallet

LANGUAGES

- **Native** – English, Hindi
- **Fluent** – Bengali

PROFESSIONAL SERVICE

- **Reviewer**, Information, 2018
- **Reviewer**, Scientific Programming, 2018
- **Program Committee Member**, International Workshop on Semantic Web for Social Good, ISWC 2018
- **FigShare Ambassador**, 2018
- **Program Committee Member (Research; Posters and demos)**, International Semantic Web Conference (ISWC), 2018
- **Co-Chair**, workshop on Deep Learning for Knowledge Graphs and Semantic Technologies, to be held at the Extended Semantic Web Conference (ESWC) in Crete , Greece 2018
- **Guest Editorial Board**, Special Issue on Representation Learning for the Semantic Web, Journal of Web Semantics (2018)
- **Co-Chair**, BigNet workshop, to be held at the ACM The Web Conference (formerly known as ACM WWW) in Lyon, France 2018
- **Guest Editorial Board**, Special Issue on Semantic Deep Learning, Semantic Web Journal (2018)
- **Judge**, Virtual Poster Showcase at the American Geophysical Union Fall Meeting, 2017
- **Program Committee Member**, 1st Workshop on Knowledge Base Construction, Reasoning and Mining (KBCOM), co-held with ACM WSDM Conference 2018
- **Reviewer**, Semantic Web Journal (Nov. 2017)
- **Reviewer**, ACM Transactions on the Web (Nov. 2017)
- **Program Committee Member**, ACM The Web Conference (TheWebConf; former ACM World Wide Web), 2018
- **Reviewer**, IEEE Transactions on Knowledge and Data Engineering (TKDE), 2017
- **Co-Chair**, Hybrid Statistical Semantic Understanding and Emerging Semantics Workshop (HSSUES) half-day workshop, to be held at International Semantic Web Conference (ISWC), 2017
- **Program Committee Member**, Data-driven Discovery of Models (D3M) half-day workshop, to be held at International Conference on Data Mining (ICDM), 2017
- **Program Committee Member**, Broadening Participation in Data Mining (BPDM) workshop, to be held at KDD 2017
- **Program Committee Member (Research; Posters and demos)**, International Semantic Web Conference (ISWC), 2016
- **Sub-reviewer**, ACM World Wide Web Conference (WWW), 2017
- **Program Committee Member (Posters and demos)**, International Semantic Web Conference (ISWC), 2016
- **Program Committee Member**, International Joint Conference on Artificial Intelligence (IJCAI), 2016
- **Reviewer**, ACM Journal of Data and Information Quality (JDIQ), 2016
- **Sub-reviewer**, International Joint Conference on Artificial Intelligence (IJCAI), 2015

- **Sub-reviewer**, Very Large Databases (VLDB), 2013

OUTREACH

- **AI Topics for K-12**, Editor-in-chief (March 2017-Current), [Website](#)
- **AAAI Connections**, Volunteer (February 2017)
- **Present your research to a 12-year old**, Invited speaker at multiple venues (December 2015-May 2016)
- **Engineering Open House**, University of Illinois at Urbana-Champaign (2010)

HONORS SOCIETIES

- **Phi Kappa Phi**
- **Tau Beta Pi**
- **Alpha Lambda Delta**
- **Phi Eta Sigma**

HACKATHONS

- **End Human Trafficking Hackathon**, Cornell (2016); *featured in* [NY Daily News](#)
- **Kaggle**, Web competitions (2014-2016)
- **CareerBuilder Summer Hackathon**, CareerBuilder (2015)
- **dataHackUT**, University of Texas at Austin (2014)

PROFESSIONAL SOCIETIES

- **Association for the Advancement of Artificial Intelligence (AAAI)**
- **American Association for the Advancement of Science (AAAS)**
- **Association for Computing Machinery (ACM)**
- **Institute of Electrical and Electronics Engineers (IEEE)**
- **Society for Industrial and Applied Mathematics (SIAM)**
- **American Geophysical Union (AGU)**

ALUMNI NETWORKS

- **Heidelberg Laureate Forum/German Scholars Organization e.V.** (2017)
- **University of Texas** (2016)
- **University of London** (2015)
- **University of Illinois** (2012)

INVITED PARTICIPANT

- **National Science Foundation Data Science Workshop (2015)**: an NSF-funded workshop attended by Ph.D. level data scientists from across the United States
- **Heidelberg Laureate Forum (2015)**: Participant, one of among 200 globally selected Math and CS students

RESEARCH MENTOR

- **Yao Gu** (THOR)
- **Mozhdeh Gheini** (GAIA)
- **Fan Pan** (THOR)
- **Zihao Zhai** (THOR)
- **Haotian Zhang** (THOR)
- **Rahul Kapoor** (DIG)
- **Yixiang Yao** (Record Linkage Toolkit)
- **Pulkit Manocha** (Record Linkage Toolkit)
- **Jing Peng** (THOR)
- **Qiaozhi Song** (THOR)
- **Daye Nam** (THOR; [schema.org](#))
- **Runqi Shao** (DIG)
- **Jiayuan Ding** (DIG)
- **I-Hui Huang** (DSBox)
- **Fanghao Luo** (DSBox)
- **Pratik Kabara** (THOR)

TUTORIALS, CASE STUDIES AND DEMOS

- Social Media Analysis for Situation Awareness during Crises* **April 2018**
Mayank Kejriwal, Pedro Szekely, Gregoire Burel, Prashant Khare
 Tutorial at the ACM Web Conference (formerly known as ACM WWW) in Lyon, France 2018
- Technology-assisted Investigative Search: A Case Study from an Illicit Domain* **April 2018**
Mayank Kejriwal, Pedro Szekely
 Case Study at the ACM CHI Conference on Human Factors in Computing Systems in Montreal, Canada 2018
- Demo: Unsupervised Hashtag Retrieval and Visualization for Crisis Informatics* **February 2018**
 Yao Gu, **Mayank Kejriwal**
 Workshop on Social Web in Emergency and Disaster Management (SWDM), co-held with the ACM Web Search and Data Mining (WSDM) Conference in Los Angeles, California
- Demo: Constructing Domain-specific Search Engines with No Programming* **February 2018**
Mayank Kejriwal, Pedro Szekely
 AAAI Conference, held in New Orleans
Nominated for Best Demo
- Demo: A Semantic Search Engine for Investigating Human Trafficking* **October 2017**
Mayank Kejriwal, Pedro Szekely
 International Semantic Web Conference (ISWC), held in Vienna, Austria
- Constructing Domain-specific Knowledge Graphs (KGC)* **October 2017**
Mayank Kejriwal, Craig Knoblock, and Pedro Szekely
 Full-day tutorial at International Semantic Web Conference (ISWC), 2017, held in Vienna, Austria
- Data Mining in Unusual Domains with Information-rich Knowledge Graph Construction, Inference and Search* **August 2017**
Mayank Kejriwal and Pedro Szekely
 Conventional Tutorial at KDD, 2017, held in Halifax, Canada
- Information Integration* **July 2017**
Mayank Kejriwal
 Tutorial at IS-GEO Summer Institute, 2017 held in Austin, TX

BOOKS

- Knowledge Graphs: Theory, Techniques and Applications* **2018**
Mayank Kejriwal, Craig Knoblock, and Pedro Szekely
 MIT Press
- Domain-specific Knowledge Graph Construction* **2018**
Mayank Kejriwal
 Springer Brief
- Joint Proceedings of the International Workshops on Hybrid Statistical Semantic Understanding and Emerging Semantics, and Semantic Statistics co-located with 16th International Semantic Web Conference (ISWC 2017)* **2017**
 Editors (Alphabetical Order): Sarven Capadisli (University of Bonn, Germany), Franck Cotton (INSEE, France), Xin Luna Dong (Amazon, USA), Ramanathan V. Guha (schema.org, USA), Armin Haller (ANU, Australia), Pascal Hitzler (Wright State University, USA), Evangelos Kalampokis (University of Macedonia, Greece), **Mayank Kejriwal (University of Southern California, USA)**, Freddy Lecue (Accenture Technology Labs, Ireland), D. Sivakumar (Google, USA), Pedro Szekely (University of Southern California, USA), Raphael Troncy (EURECOM, France) and Michael Witbrock (IBM, USA)
 URN: urn:nbn:de:0074-1923-2
 Archival Link: <http://ceur-ws.org/Vol-1923/>
- Populating a Linked Data Entity Name System: A Big Data Solution for Unsupervised Instance Matching* **2017**
Mayank Kejriwal
 IOS Press, Studies in the Semantic Web Series
 ISBN 978-3-89838-717-0 2017

PEER-REVIEWED PUBLICATIONS

- A Pipeline for Post-Crisis Twitter Data Acquisition* **February 2018**

Mayank Kejriwal, Yao Gu

Workshop on Social Web in Emergency and Disaster Management (SWDM), co-held with the ACM Web Search and Data Mining (WSDM) Conference in Los Angeles, California

Investigative Knowledge Discovery for Combating Illicit Activities

February 2018

Mayank Kejriwal, Pedro Szekely, Craig Knoblock
IEEE Intelligent Systems

Always Lurking: Understanding and Mitigating Bias in Online Human Trafficking Detection

February 2018

Kyle Hundman, Thamme Gowda, **Mayank Kejriwal** and Benedikt Boecking
AAAI/ACM Conference on AI, Ethics and Society (AIES), 2018, held in New Orleans, Louisiana

FlagIt: A System for Minimally Supervised Human Trafficking Indicator Mining

December 2017

Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar and Pedro Szekely
Workshop on *Learning with Limited Labeled Data* (LLD) at NIPS 2017, held in Long Beach, California

Knowledge Graphs for Social Good: An Entity-centric Search Engine for the Human Trafficking Domain

November 2017

Mayank Kejriwal, Pedro Szekely
IEEE Transactions on Big Data, Special Call on Knowledge Graphs

Neural Embeddings for Populated Geonames Locations

October 2017

Mayank Kejriwal, Pedro Szekely
International Semantic Web Conference (Resource Track), held in Vienna, Austria

An Investigative Search Engine for the Human Trafficking Domain

October 2017

Mayank Kejriwal, Pedro Szekely
International Semantic Web Conference (In-Use Track), held in Vienna, Austria

Scalable Generation of Type Embeddings using the ABox

August 2017

Mayank Kejriwal, Pedro Szekely
Open Journal of Semantic Web

Adaptive Candidate Generation for Scalable Edge-discovery Tasks on Data Graphs

August 2017

Mayank Kejriwal
MLG Workshop at ACM KDD, 2017, held in Halifax, Nova Scotia, Canada

Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain

May 2017

Mayank Kejriwal
DSMM Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois

Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages

May 2017

Rahul Kapoor, **Mayank Kejriwal**, Pedro Szekely
GeoRich Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois

Supervised Typing of Big Graphs using Semantic Embeddings

May 2017

Mayank Kejriwal, Pedro Szekely
Semantic Big Data (SBD) Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois

Information Extraction in Illicit Domains

April 2017

Mayank Kejriwal, Pedro Szekely
ACM World Wide Web Conference, 2017, held in Perth, Australia

Local, Domain-independent Heuristics for the FEIII Challenge: Lessons and Observations

June 2016

Mayank Kejriwal, Daniel P. Miranker
DSMM Workshop at ACM SIGMOD, 2016, held in San Francisco, California

A Pipeline for Extracting and Deduplicating Domain-Specific Knowledge Bases

October 2015

Mayank Kejriwal, Qiaoling Liu, Ferosh Jacob and Faizan Javed
Industry track in the IEEE International Conference on Big Data, held in Santa Clara, California

Decision-making Bias in Instance Matching Model Selection **October 2015**
Mayank Kejriwal, Daniel P. Miranker
 The 14th International Semantic Web Conference, held in Bethlehem, Pennsylvania

An Unsupervised Instance Matcher for Schema-free RDF Data **July 2015**
Mayank Kejriwal, Daniel P. Miranker
 The Journal of Web Semantics

Sorted Neighborhood for Schema-free RDF Data **May 2015**
Mayank Kejriwal, Daniel P. Miranker
Winner of best paper award
 The 4th Knowledge Discovery and Data Mining meets Linked Open Data workshop,
 The 12th European Semantic Web Conference, held in Portoroz, Slovenia

Semi-supervised Instance Matching using Boosted Classifiers **May 2015**
Mayank Kejriwal, Daniel P. Miranker
 The 12th European Semantic Web Conference, held in Portoroz, Slovenia

Entity Resolution in a Big Data Framework **January 2015**
Mayank Kejriwal
 Doctoral consortium, the 29th Conference on Artificial Intelligence (AAAI), held in Austin, TX

Populating Entity Name Systems for Big Data Integration **October 2014**
Mayank Kejriwal
 The 13th International Semantic Web Conference, held in Riva Del Garda, Italy

A Two-Step Blocking Scheme Learner for Scalable Link Discovery **October 2014**
Mayank Kejriwal and Daniel P. Miranker
 The 9th International Workshop on Ontology Matching at the 13th International Semantic Web Conference, held in Riva Del Garda, Italy

Schema Matching over Relations, Attributes and Data Values **July 2014**
 Aibo Tian, **Mayank Kejriwal** and Daniel P. Miranker
 The 26th International Conference on Scientific and Statistical Database Management, held in Aalborg, Denmark

An Unsupervised Algorithm for Learning Blocking Schemes **December 2013**
Mayank Kejriwal and Daniel P. Miranker
 The 13th IEEE International Conference on Data Mining, held in Dallas, Texas

Extended Scaled Neural Predictor for Improved Branch Prediction **August 2013**
 Zihao Zhou, **Mayank Kejriwal** and Risto Miikkulainen
 The IEEE International Conference on Neural Networks, held in Dallas, Texas

A Framework to Access Handwritten Information within Large Digitized Paper Collections **October 2012**
 Liana Diesendruck, Luigi Marini, Rob Kooper, **Mayank Kejriwal** and Kenton McHenry
 The 8th IEEE International Conference on eScience, held in Chicago, Illinois

Digitization and search: A non-traditional use of HPC **October 2012**
 Liana Diesendruck, Luigi Marini, Rob Kooper, **Mayank Kejriwal** and Kenton McHenry
 The 8th IEEE International Conference on eScience, held in Chicago, Illinois

ABSTRACTS, POSTERS, NEWSLETTERS AND PRESS

Always Lurking: Understanding and Mitigating Bias in Online Human Trafficking Detection **February 2018**
 Kyle Hundman, Thamme Gowda, **Mayank Kejriwal** and Benedikt Boecking
 Poster presented at AAAI/ACM Conference on AI, Ethics and Society (AIES), 2018, held in New Orleans, Louisiana

FlagIt: A System for Minimally Supervised Human Trafficking Indicator Mining **December 2017**
Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar and Pedro Szekely
 Poster in Workshop on *Learning with Limited Labeled Data* (LLD) at NIPS 2017, held in Long Beach, California

ISI press release on winning best dissertation award

August 2017

<https://www.isi.edu/news/story/301>

Semi-automatic Data Integration using Karma

December 2017

Mayank Kejriwal, Daniel Garijo, Yolanda Gil, Daniel Hardesty Lewis, Perry Ivan Quinto Houser, Craig Knoblock, Scott Dale Peckham, Deana Pennington, Suzanne Pierce, Zachary Stanko

Abstract in American Geophysical Union (AGU) Fall 2017 meeting, New Orleans

Populating a Linked Data Entity Name System

June 2017

Mayank Kejriwal

Dissertation abstract in AI Matters

Authored piece on Semantic Web published on the AI Topics website

April 2017

<https://aitopics.org/class/Technology/IT/Communications/Web/Semantic%20Web>

Authored piece on Games and AI published on the AI Topics website

April 2017

<https://aitopics.org/class/Technology/IT/AI/Games>

End Human Trafficking Hackathon

October 2016

Hackathon was featured in [NY Daily News](#); served as mentor to students

The Summer of Data Science

October 2015

Quoted in blog post by Kristin Tolle, Director of Data Science at Microsoft Research

Populating a Linked Data Entity Name System

August 2015

Mayank Kejriwal, Daniel P. Miranker

Poster at the Heidelberg Laureate Forum, held in Heidelberg, Germany

Unsupervised Instance Matching on Schema-free Linked Data

August 2015

Mayank Kejriwal, Daniel P. Miranker

Poster at the National Science Foundation Data Science Workshop, held in Seattle, Washington

Minimally Supervised Instance Matching: An Alternate Approach

May 2015

Mayank Kejriwal, Daniel P. Miranker

Poster and abstract at the 12th European Semantic Web Conference, held in Portoroz, Slovenia

The Math Behind...The Web of Linked Data

March 2015

Mayank Kejriwal

Poster for the SIAM: Math Matters, Apply It! program

A Sorted Neighborhood Workflow for the Semantic Web

January 2015

Mayank Kejriwal and Daniel P. Miranker

Poster and abstract at the 29th Conference on Artificial Intelligence (AAAI)

On Linking Heterogeneous Dataset Collections

October 2014

Mayank Kejriwal and Daniel P. Miranker

Poster and abstract at the 13th International Semantic Web Conference, held in Riva Del Garda, Italy

Populating Entity Name Systems for Big Data Integration

October 2014

Mayank Kejriwal and Daniel P. Miranker

Doctoral Consortium Poster at the 13th International Semantic Web Conference, held in Riva Del Garda, Italy

An Unsupervised Algorithm for Learning Blocking Schemes

December 2013

Mayank Kejriwal and Daniel P. Miranker

Poster at the 13th IEEE International Conference on Data Mining, held in Dallas, Texas

Extended Scaled Neural Predictor for Improved Branch Prediction

August 2013

Zihao Zhou, **Mayank Kejriwal** and Risto Miikkulainen

Poster at the IEEE International Conference on Neural Networks, held in Dallas, Texas

Digitization and Search: A Non-Traditional Use of HPC

October 2012

Liana Diesendruck, Luigi Marini, Rob Kooper, **Mayank Kejriwal** and Kenton McHenry
 Poster and abstract at the 8th IEEE International Conference on eScience, held in Chicago, Illinois

Toward Free and Searchable Historical Census Images

September 2011

Kenton McHenry, Luigi Marini, **Mayank Kejriwal**, Rob Kooper and Peter Bajcsy

- Published as an article in the Electronic Imaging & Signal Processing section by the International Society for Optics and Photonics
- Published as a technical article in infoDOCKET

TECHNICAL REPORTS*A Pipeline for Post-Crisis Twitter Data Acquisition*

January 2018

Mayank Kejriwal, Yao Gu

Technical Report (arXiv: 1801.05881)

Unsupervised Hashtag Retrieval and Visualization for Crisis Informatics

January 2018

Yao Gu, **Mayank Kejriwal**

Technical Report (arXiv: 1801.05906)

FlagIt: A System for Minimally Supervised Human Trafficking Indicator Mining

December 2017

Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar and Pedro Szekely

Technical Report (arXiv: 1712.03086)

Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain

April 2017

Mayank Kejriwal

Technical Report (arXiv:1704.05571)

Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages

April 2017

Rahul Kapoor, **Mayank Kejriwal** and Pedro Szekely

Technical Report (arXiv:1704.05569)

Supervised Typing of Big Graphs using Semantic Embeddings

March 2017

Mayank Kejriwal and Pedro Szekely

Technical Report (arXiv:1703.07805)

Information Extraction in Illicit Domains

March 2017

Mayank Kejriwal and Pedro Szekely

Technical Report (arXiv:1703.03097)

Experience: Type alignment on DBpedia and Freebase

August 2016

Mayank Kejriwal and Daniel P. Miranker

Technical Report (arXiv:1608.04442)

Self-contained NoSQL Resources for Cross-Domain RDF

August 2016

Mayank Kejriwal and Daniel P. Miranker

Technical Report (arXiv:1608.04437)

On the Complexity of Sorted Neighborhood

January 2015

Mayank Kejriwal and Daniel P. Miranker

Technical Report (arXiv:1501.01696)

A DNF Blocking Scheme Learner for Heterogeneous Datasets

January 2015

Mayank Kejriwal and Daniel P. Miranker

Technical Report (arXiv:1501.01694)

N-Way Heterogeneous Blocking

February 2014

Mayank Kejriwal and Daniel P. Miranker

Regular Technical Report (TR-14-06), University of Texas at Austin

TALKS

<i>Technology-assisted Investigative Search: A Case Study from an Illicit Domain</i> Talk at the ACM CHI Conference on Human Factors in Computing Systems in Montreal, Canada	April 2018
<i>Building Knowledge Graphs for Social Good</i> Spring Seminar Series, USC Center for Artificial Intelligence in Society (CAIS)	March 2018
<i>The Many Face(t)s of Knowledge Graphs: In Vivo vs. In Vitro</i> Research Breakfast Seminar Series, USC Information Sciences Institute	February 2018
<i>Building Advanced Search and Analytics Engines over Arbitrary Domains...Without a Data Scientist</i> Invited speaker at Data Day Texas	January 2018
<i>Building Domain-specific Search Engines for Investigative Decision Support</i> Invited seminar presentation: USC Department of Industrial and Systems Engineering	January 2018
<i>On the Future of the Semantic Web</i> Invited presentation at the Digital Turn in Comparative Constitutionalism Workshop, held in Hannover, Germany	December 2017
<i>Neural Embeddings for Populated Geonames Locations</i> International Semantic Web Conference, held in Vienna, Austria	October 2017
<i>An Investigative Search Engine for the Human Trafficking Domain</i> International Semantic Web Conference, held in Vienna, Austria	October 2017
<i>From Noisy Information Extraction to Rich Information Retrieval in Unusual Domains</i> NLP Seminar Information Sciences Institute, USC	June 2017
<i>Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain</i> DSMM Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	May 2017
<i>Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages</i> GeoRich Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	May 2017
<i>Populating a Linked Data Entity Name System</i> Ph.D. Final Defense, University of Texas at Austin Committee: Daniel P. Miranker (chair), Raymond Mooney, Joydeep Ghosh, Risto Miikkulainen and Eric Price	April 2016
<i>Populating a Linked Data Entity Name System</i> AI Seminar: Interview Talk Information Sciences Institute, USC	April 2016
<i>Decision-making Bias in Instance Matching Model Selection</i> The 14 th International Semantic Web Conference, to be held in Bethlehem, Pennsylvania	October 2015
<i>Decision-making Bias in Instance Matching Model Selection</i> The 14 th International Semantic Web Conference, to be held in Bethlehem, Pennsylvania	October 2015
<i>Sorted Neighborhood for Schema-free RDF Data</i> The 4 th Knowledge Discovery and Data Mining meets Linked Open Data workshop, The 12 th European Semantic Web Conference, held in Portoroz, Slovenia	May 2015
<i>Semi-supervised Instance Matching using Boosted Classifiers</i> The 12 th European Semantic Web Conference, held in Portoroz, Slovenia	May 2015
<i>Entity Resolution in a Big Data Framework</i> Doctoral consortium, the 29 th Conference on Artificial Intelligence (AAAI)	January 2015

*Populating a Linked Data-based Entity Name System***November 2014**

Ph.D. Oral Proposal, University of Texas at Austin

Committee: Daniel P. Miranker (chair), Raymond Mooney, Joydeep Ghosh, Risto Miikkulainen and Eric Price

*Populating Entity Name Systems for Big Data Integration***October 2014**The 13th International Semantic Web Conference, held in Riva Del Garda, Italy*A Two-Step Blocking Scheme Learner for Scalable Link Discovery***October 2014**The 9th International Workshop on Ontology Matching at the 13th International Semantic Web Conference, held in Riva Del Garda, Italy*Populating an Entity Name System***March 2014**

Research Preparation Exam, University of Texas at Austin

Committee: Daniel P. Miranker (chair), Greg Plaxton and Pradeep Ravikumar

*An Unsupervised Algorithm for Learning Blocking Schemes***December 2013**The 13th IEEE International Conference on Data Mining, held in Dallas, Texas*Machine Learning Techniques for Offline Handwriting Transcription***December 2012**

Undergraduate honors thesis presentation at the University of Illinois at Urbana-Champaign