## MAYANK KEJRIWAL

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#### **CURRENT POSITION**

Research Assistant Professor April 2019-Current

Industrial and Systems Engineering Viterbi School of Engineering University of Southern California

Research Lead April. 2019-Current

Information Sciences Institute Viterbi School of Engineering University of Southern California

## **EDUCATION**

University of Texas at Austin Department of Computer Science

M.Sc. and Ph.D., Computer Science Aug. 2012-May 2016

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

**Recipient of SWSA Best Dissertation Award** 

University of Illinois at Urbana-Champaign

Department of Electrical and Computer Engineering

B.Sc. in Computer Engineering, Highest Honors Aug. 2009-Aug. 2012

Honors thesis: Machine Learning Techniques in Offline Handwriting Transcription

### **CURRENT PROJECTS**

Generating Novelty in Open-World Multi-Agent Environments (GNOME)

Since Dec. 2019

Principal Investigator Amount: 2,966,772\$

Anticipated Period of Performance: Dec. 2019-May 2023

Funded under DARPA Science of Artificial Intelligence and Learning for Open-world Novelty (SAIL-ON) program

Key Responsibilities: Developing a domain-independent science of novelty that can be used to characterize novel phenomena at various levels of granularity and specificity in multiple domains, and a domain-specific testbed (platform, protocol and metrics) that can be used to evaluate external novelty-adaptive AI systems being developed for playing stochastic multi-agent board games of strategy (e.g., Monopoly)

# **Representation Learning for Product Graphs**

Since Sep. 2019

Principal Investigator
Amount: 25,000\$

Funded under Yahoo! Faculty Research Engagement Program (FREP)

**Key Responsibilities:** Researching knowledge graph-based approaches for processing and doing analytics on Web-scale e-commerce datasets, including application areas such as product categorization, representation learning and entity reconciliation

### Multi-modal Open World Grounded Learning and Inference (MOWGLI)

Since Aug. 2019

Co-Principal Investigator
Amount: 9,850,056\$

Anticipated Period of Performance: Jun. 2019-May 2023

Funded under DARPA Machine Common Sense (MCS) program

**Key Responsibilities:** Researching neuro-symbolic techniques and algorithms for enabling machines to understand commonsense situations evaluated using both natural language and visual question-answering stimuli

# **Crisis Understanding using Intelligent Systems**

Since Jul. 2019

Principal Investigator Amount: 4650\$

Anticipated Period of Performance: May/Jun. 2020

Funded under USC Undergraduate Research Associates Program (URAP)

**Key Responsibilities:** Mentoring undergraduate students in research in a social impact project that applies Artificial Intelligence techniques to deriving actionable insights from social media data during natural disasters and crises

## **Discovery and Dismantling of Human Trafficking Networks**

Since Jan. 2019

Principal Investigator Amount: 100,000\$

Anticipated Period of Performance: Jan. 2019-Dec. 2020

Funded under Keston Research Project (non-contract)

Key Responsibilities: Building software and systems to enable a highly collaborative (with law enforcement, federal agencies and social and political scientists) endeavor to computationally discover (and dismantle) sex trafficking activity at national and global scales

### **PAST PROJECTS**

## THOR: Text-enabled Humanitarian Operations in Real-time

Jun. 2016-Jan. 2020

Principal Investigator

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

**Key Responsibilities:** Researching and transitioning robust entity linking, instance matching, clustering and network analysis methods to provide situational awareness to customers in the humanitarian assistance and disaster relief (HADR) domain

## **ELICIT: A System for Extracting and Organizing Causal Information**

Aug. 2017-Jan. 2019

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 Mar. 2017-Jan. 2019

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.

### **GAIA: Generating Alternatives for Interpretation and Analysis**

Jan. 2018-Aug. 2018

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-May 2018

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.

## **DIG: Domain-specific Insight Graphs**

Jun. 2016-Apr. 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

Copper Black Award for Creative Achievement awarded by the Mensa Foundation 20	019
Intellectual Benefits to Society Award awarded by the Mensa Foundation	019
Red Judge, IBM Watson AI XPrize 20	019
Forbes 30 Under 30 Shortlist (Science Category)	019
Forbes Under 30 Scholar	018
USC Marshall MBA Admissions Scholarship 20	018-2019
THOR featured in DARPA's 60 <sup>th</sup> anniversary	018
ISI Publication Award (500\$)	018
Al2 Key Scientific Challenge Winner (10,000\$)	018
Semantic Web Science Association Best Dissertation Award	017
Amazon Cloud Credits for Research Grant	017
Microsoft Azure for Research Grant 20	017
AAAI Doctoral Consortium Travel Award	015
Microsoft Azure for Research Grant 20	014
National Science Foundation Travel Grant 20	014

2013 Department Nominee: Microsoft, Google fellowships **Department Travel Grant** 2013 MCD Fellowship 2012-2014 Daniel and Carol Dobberpuhl Award 2012 2012 Senior 100 Honorary 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

Research Assistant Professor Aug. 2019-Dec. 2019

ISE 599: Special Topics (Applied Predictive Analytics)

University of Southern California

Lecturer in Computer Science Aug. 2016-Dec. 2016

CSCI 548: Information Integration

University of Texas at Austin

Teaching Assistant Aug. 2012-Jun. 2014

Contemporary Issues in Computer Science (Spring 2014) Automata Theory (Spring 2013) Data Management (Falls 2013, 2012) Artificial Intelligence (Fall 2012)

## **EXPERIENCE**

Department of Industrial and Systems Engineering, USC

Research Assistant Professor Apr. 2019-Current

Engage in research, mentorship and teaching activities as research faculty in the ISE department

Information Sciences Institute, USC

Research Lead Apr. 2019-Current

Lead multiple government funded research projects in ISI's Center on Knowledge Graphs

Information Sciences Institute, USC

Computer Scientist Jun. 2016-Current

Conduct research on multiple government-funded projects in ISI's Center on Knowledge Graphs

Information Sciences Institute, USC

AI Seminar Coordinator Jan. 2017-Jan. 2018

 ${\it Invited experts in AI and organized talks under the Intelligent Systems \ division \ at \ ISI}$ 

Capsenta, Inc.

Semantic Web Consultant May 2016-Jun. 2016

 $Worked\ on\ integrating\ advanced\ ontology\ matching\ solutions\ in\ the\ company's\ current\ products$ 

University of Texas at Austin

Graduate Research Assistant Jun. 2014-May 2016

Conducted research in RiBS group led by Daniel P. Miranker

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-Jul. 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**

- Program Committee Member, In-use track, International Semantic Web Conference (ISWC), 2020
- Program Committee Member, 2<sup>nd</sup> Conference on Automated Knowledge Base Construction (AKBC), 2020
- Program Committee Member, Workshop on Deep Learning for Knowledge Graphs and Semantic Technologies, to be held at the
  Extended Semantic Web Conference (ESWC) in 2020
- Program Committee Member, IEEE International Conference on Semantic Computing (ICSC), 2020
- Program Committee Member, Extended Semantic Web Conference (ESWC), 2020
- Co-Track Chair, Machine Learning Track, Extended Semantic Web Conference (ESWC), 2020
- Program Committee Member, AAAI Conference (Demonstrations Track), 2020
- Program Committee Member, AAAI Conference (Research Track), 2020
- Reviewer, SoftwareX, 2019
- General Chair, ACM Knowledge Capture (K-CAP) Conference, 2019
- Organizer, AI for Social Good (Humanitarian Relief and Development Track) at AAAI Fall Symposium, 2019
- Program Committee Member, New Trends in Representation Learning with Knowledge Graphs (KGRL), ECML PKDD Workshop, 2019
- Reviewer, Expert Systems with Applications (Elsevier), 2019
- Program Committee Member, The Ninth International Conference on Social Media Technologies, Communication, and Informatics (SOTICS). 2019
- Program Committee Member, The 13<sup>th</sup> IEEE International Conference on Semantic Computing (ICSC), 2020
- Program Committee Member, 6<sup>th</sup> ICML Workshop on Automated Machine Learning (AutoML 2019)
- Program Committee Member, Workshop on Knowledge Graph Representation Learning for Flexible Reasoning co-held with ECML-PKDD, 2019
- Reviewer, Data Technologies and Applications, 2019
- Reviewer, ACM Computing Surveys, 2019
- Program Committee Member, International Semantic Web Conference (Research Track), 2019
- Session Chair, AAAI Conference (AI and the Web 2 Session), Jan. 29 2019
- Session Chair, AAAI Conference (Applications and the Web 1 Session), Jan. 29 2019
- Session Chair, AAAI Conference (Applications and the Web 2 Session), Jan. 30 2019
- Program Committee Member, Workshop on Semantic Web for Social Good (SWSG) co-held with the International Semantic Web Conference (ISWC), 2019
- Invited Member, MIT Technology Review Global Panel, 2019
- Reviewer, Data and Knowledge Engineering (Elsevier), 2019
- Reviewer, Information Systems (Elsevier), 2019
- Reviewer, Applied Sciences Journal (MDPI), 2019
- Program Committee Member, 7th International Conference on Building and Exploring Web Based Environments (WEB 2019)
- Program Committee Member, Extended Semantic Web Conference (ESWC), 2019
- Reviewer, 1st International Conference on Automated Knowledge Base Construction, 2019

 Program Committee Member, 1st International Workshop on Intelligence & Interaction in Knowledge Engineering (IIKE) held in conjunction with the 13<sup>th</sup> IEEE International Conference on Semantic Computing, 2019

- Reviewer, CHI 2019
- Program Committee Member, The 13<sup>th</sup> IEEE International Conference on Semantic Computing (ICSC), 2019
- Program Committee Member, AAAI Conference (Demonstration Track), 2019
- Program Committee Member, AAAI Conference (Research Track), 2019
- Program Committee Member, The ACM Web Conference (Web Mining and Content Analysis Track), 2019
- Panelist, International Workshop on Semantic Web for Social Good, ISWC 2018
- Jury Member, International Semantic Web Conference: Posters and Demos, 2018
- Student Voice Champion, University of London, 2018-2019
- Editorial Board Member, Special Issue on Knowledge Graphs, international Semantic Web Journal, 2018
- Reviewer, Applied Sciences Journal (MDPI), 2018
- Reviewer, IEEE Transactions on Knowledge and Data Engineering (TKDE), 2018
- Reviewer, ACM Transactions on the Web, 2018
- Reviewer, Semantic Web Journal, 2018
- Reviewer. Technologies. 2018
- Reviewer, Information, 2018
- Reviewer, Scientific Programming, 2018
- Reviewer, Machine Learning and Knowledge Extraction Journal, 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)
- Program Committee Member, 1st Workshop on Knowledge Base Construction, Reasoning and Mining (KBCOM), co-held with ACM WSDM Conference 2018
- Judge, Virtual Poster Showcase at the American Geophysical Union Fall Meeting, 2017
- 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), 2017
- 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 AND ACTIVITIES**

- MIT Operations Simulation Competition, USC Team MNXP Member (April 2019), Website
- Everyone's Business Global Case Competition on Gender Equity, USC Team Ruth Bader Ginsberg Member (March 2019), Website
- Al 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 AND INTELLIGENCE SOCIETIES**

- Phi Kappa Phi
- Tau Beta Pi
- Alpha Lambda Delta

- Phi Eta Sigma
- Mensa
- Intertel
- Triple Nine Society

## **HACKATHONS**

- Classifying Clinically Actionable Genetic Mutations, NIPS Competition (2017)
- 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)

### **ALUMNI NETWORKS**

- London School of Economics, Los Angeles Chapter (2019)
- University of Southern California, Marshall School of Bsuiness (2018)
- Heidelberg Laureate Forum/German Scholars Organization e.V. (2017)
- University of Texas (2016)
- University of London (2015)
- University of Illinois (2012)

### INVITED PARTICIPANT

- Concordia Summit (2019), co-held with the UN General Assembly in New York City: Roundtable on using Artificial intelligence for combating online sexual abuse of children
- National Science Foundation Data Science Workshop (2015), held in Seattle: NSF-funded workshop attended by Ph.D. level data scientists after a rigorous national selection process
- Heidelberg Laureate Forum (2015), held in Heidelberg, Germany: Invitation-only forum for 200 globally selected Math and CS students

## RESEARCH MENTOR

- Shilpa Thomas (GNOME)
- Akarsh Dang (THOR)
- Jiayuan Ding (DIG, Commonsense Reasoning)
- Ravi Kiran Selvam (THOR; e-commerce knowledge graphs)
- Minda Hu (Social media analytics)
- Peilin Zhou (THOR)
- Shixiang Zhu (THOR; CauseEx)
- Xin Huang (THOR; GAIA)
- Xuefeng Yan (THOR; Knowledge Graph Embeddings Project)
- Jianheng Hou (THOR)
- Shuo Zhang (THOR; Fake News Project)
- Yao Gu (THOR; Human Trafficking Project)
- 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)

Rungi Shao (DIG)

I-Hui Huang (DSBox)

Fanghao Luo (DSBox)

Pratik Kabara (THOR)

**TUTORIALS, CASE STUDIES AND DEMOS** 

Tutorial: AI, Networks and Society Sep. 2019

Mayank Kejriwal

Invited Annenberg Micro-seminar, University of Southern California

Demo: SAVIZ: Interactive Exploration and Visualization of Social Media over Crisis Data

Aug. 2019

Mayank Kejriwal and Peilin Zhou

The IEEE/ACM ASONAM Conference in Vancouver, Canada 2019

Demo: Expert-Guided Entity Extraction using Expressive Rules

Jul. 2019

Mayank Kejriwal, Runqi Shao and Pedro Szekely The ACM SIGIR Conference in Paris, France 2019

Case Study: Reusing data and building upon it

Aug. 2018

Mayank Kejriwal, Megan Hardeman and Team Figshare

Figshare case study <u>accessed online</u>

Demo: THOR: Text-enabled Humanitarian Operations in Real-time Apr. 2018

Mayank Kejriwal, Daniel GIlley, Pedro Szekely, Jill Crisman

The ACM Web Conference (formerly known as ACM WWW) in Lyon, France 2018

Tutorial: Social Media Analysis for Situation Awareness during Crises Apr. 2018

Gregoire Burel, Mayank Kejriwal, Prashant Khare, Pedro Szekely

Tutorial at the ACM Web Conference (formerly known as ACM WWW) in Lyon, France 2018

Case Study: Technology-assisted Investigative Search: A Case Study from an Illicit Domain Apr. 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 Feb. 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

Tutorial: Knowledge Graph Construction from Web Corpora Feb. 2018

Mayank Kejriwal, Craig Knoblock and Pedro Szekely

AAAI Conference, held in New Orleans

Demo: Constructing Domain-specific Search Engines with No Programming Feb. 2018

Mayank Kejriwal, Pedro Szekely
AAAI Conference, held in New Orleans

**Nominated for Best Demo** 

Demo: A Semantic Search Engine for Investigating Human Trafficking Oct. 2017

Mayank Kejriwal, Pedro Szekely

International Semantic Web Conference (ISWC), held in Vienna, Austria

Tutorial: Constructing Domain-specific Knowledge Graphs (KGC)

Oct. 2017

Mayank Kejriwal, Craig Knoblock, and Pedro Szekely

Full-day tutorial at International Semantic Web Conference (ISWC), 2017, held in Vienna, Austria

Tutorial: Data Mining in Unusual Domains with Information-rich Knowledge Graph Construction, Inference and Search

Mayank Kejriwal and Pedro Szekely Aug. 2017

Conventional Tutorial at KDD, 2017, held in Halifax, Canada

**Tutorial:** Information Integration

Jul. 2017

Mayank Keiriwal

Tutorial at IS-GEO Summer Institute, 2017 held in Austin, TX

**BOOKS AND BOOK CHAPTERS** 

Knowledge Graphs: Theory, Techniques and Applications

2020

Mayank Kejriwal, Craig Knoblock, and Pedro Szekely

MIT Press

Chapter 33: Domain-specific Search Engines for Investigating Human Trafficking and Other Illicit Activities

Dec. 2019

Encyclopedia of Criminal Activities and the Deep Web

ISBN13: 9781522597155 DOI: 10.4018/978-1-5225-9715-5

Encyclopedia Link

Domain-specific Knowledge Graph Construction

2019

Mayank Kejriwal Springer Brief **Book Purchase Link** 

Proceedings of the 2018 International Workshop on Learning Representations for Big Networks (BigNet@WWW2018) co-located with the International World Wide Web Conference (WWW 2018)

Editors: Jie Tang (Tsinghua University, China), Michalis Vazirgiannis (Ecole Polytechnique, France). Yuxiao Dong (Microsoft Research, Redmond, CA), Fragkiskos D. Malliaros (CentraleSupelec, France), Michael Cochez (Fraunhofer FIT, Germany), Mayank Kejriwal (University of Southern California, USA), Achim Rettinger (Karlsruhe Institute of Technology, Germany)

ISBN: 978-1-4503-5640-4

Archival Link: https://dl.acm.org/citation.cfm?id=3192293

Proceedings of the First Workshop on Deep Learning for Knowledge Graphs and Semantic Technologies (DL4KGS) co-located with the 15th Extended Semantic Web Conference (ESWC 2018)

2018

Editors (Alphabetical Order): Michael Cochez (Fraunhofer Institute for Applied Information Technology, Germany), Thierry Declerck (DFKI GmbH, Germany), Gerard de Melo (Rutgers University, USA), Luis Espinosa Anke (Cardiff University, UK), Besnik Fetahu (L3S Research Center, Germany), Dagmar Gromann (International Center for Computational Logic, Germany), Mayank Kejriwal (University of Southern California, USA), Maria Koutraki (FIZ-Karlsruhe, Germany), Freddy Lecue (Accenture, Ireland), Enrico Palumbo (ISMB, Italy), Harald Sack (FIZ-Karlsruhe, Germany) URN: urn:nbn:de:0074-2106-7

Archival Link: <a href="http://ceur-ws.org/Vol-2106">http://ceur-ws.org/Vol-2106</a>

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)

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: <a href="http://ceur-ws.org/Vol-1923/">http://ceur-ws.org/Vol-1923/</a>

Populating a Linked Data Entity Name System: A Big Data Solution for Unsupervised Instance Matching

Mayank Kejriwal

IOS Press, Studies in the Semantic Web Series

ISBN: 978-3-89838-717-0 2017

### PEER-REVIEWED PUBLICATIONS

Co-LOD: Continuous Space Linked Open Data

Oct. 2019

2017

Outrageous ideas track

Winner of Blue Sky Ideas award

Mayank Kejriwal, Pedro Szekely

The 2019 International Semantic Web Conference, held in Auckland, New Zealand

Concept Drift in Bias and Sensationalism Detection: An Experimental Study

Aug. 2019

Multi-disciplinary track

Shuo Zhang, Mayank Kejriwal

The 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, held in Vancouver, Canada

Low-supervision urgency detection and transfer in short crisis messages

Aug. 2019

Mavank Keiriwal. Peilin Zhou

The 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, held in Vancouver, Canada

Network-theoretic information extraction quality assessment in the human trafficking domain

Jul. 2019

Mayank Kejriwal, Rahul Kapoor

Applied Network Science, Elsevier

Unsupervised Product Entity Resolution using Graph Representation Learning

Jul. 2019

Mozhdeh Gheini, Mayank Kejriwal

The ACM 2019 SIGIR Workshop on eCommerce, held in Paris, France

A Pipeline for Rapid Post-Crisis Twitter Data Acquisition, Filtering and Visualization

Apr. 2019

Mayank Kejriwal, Yao Gu

MDPI Technologies, Special Issue on Multimedia and Cross-modal Retrieval

myDIG: Personalized Illicit Domain-Specific Knowledge Discovery with No Programming

Mar. 2019

Mayank Kejriwal, Pedro Szekely

**Future Internet** 

GAIA-A Multi-media Multi-lingual Knowledge Extraction and Hypothesis Generation System

Nov. 2018

Tongtao Zhang, Ananya Subburathinam , Ge Shi , Lifu Huang , Di Lu , Xiaoman Pan , Manling Li , Boliang Zhang, Qingyun Wang , Spencer Whitehead , Heng Ji, Alireza Zareian , Hassan Akbari , Brian Chen , Ruiqi Zhong , Steven Shao , Emily Allaway , Shih-Fu Chang , Kathleen McKeown, Dongyu Li, Xin Huang, Kexuan Sun, Xujun Peng , Ryan Gabbard , Marjorie Freedman , Mayank Kejriwal , Ram Nevatia , Pedro Szekely, T.K. Satish Kumar, Ali Sadeghian , Giacomo Bergami , Sourav Dutta , Miguel Rodriguez, Daisy Zhe Wang Text Analysis Conference (TAC) KBP track, 2018

Structured Event Entity Resolution in Humanitarian Domains

Oct. 2018

Mayank Kejriwal, Jing Peng, Haotian Zhang and Pedro Szekely

International Semantic Web Conference (Research Track), held in Monterrey, California

P4ML: A Phased Performance-Based Pipeline Planner for Automated Machine Learning

Jul. 2018

Yolanda Gil, Ke-Thia Yao, Varun Ratnakar, Daniel Garijo, Greg Ver Steeg, Pedro Szekely, Robert Brekelmans, **Mayank Kejriwal**, Fanghao Luo and I-Hui Huang

 $AutoML\ Workshop\ 2018\ at\ the\ International\ Conference\ on\ Machine\ Learning\ (ICML)\ in\ Stockholm,\ Sweden$ 

How do Organizations Publish Semantic Markup? Three Case Studies Using Public Schema.org Crawls

Jun. 2018

Daye Nam, Mayank Kejriwal

**IEEE Computer** 

Domain-specific Insight Graphs

Apr. 2018

Pedro Szekely, Mayank Kejriwal

International Project track paper at the ACM Web Conference (formerly known as ACM WWW) in Lyon, France 2018

A Pipeline for Post-Crisis Twitter Data Acquisition

Feb. 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

Feb. 2018

Mayank Kejriwal, Pedro Szekely, Craig Knoblock

**IEEE Intelligent Systems** 

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

Feb. 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  Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar and Pedro Szekely	Dec. 2017
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 Mayank Kejriwal, Pedro Szekely	Nov. 2017
IEEE Transactions on Big Data, Special Call on Knowledge Graphs	
Neural Embeddings for Populated Geonames Locations  Mayank Kejriwal, Pedro Szekely	Oct. 2017
International Semantic Web Conference (Resource Track), held in Vienna, Austria	
An Investigative Search Engine for the Human Trafficking Domain  Mayank Kejriwal, Pedro Szekely	Oct. 2017
International Semantic Web Conference (In-Use Track), held in Vienna, Austria	
Scalable Generation of Type Embeddings using the ABox  Mayank Kejriwal, Pedro Szekely  Open Journal of Computing Web	Aug. 2017
Open Journal of Semantic Web	
Adaptive Candidate Generation for Scalable Edge-discovery Tasks on Data Graphs  Mayank Kejriwal	Aug. 2017
MLG Workshop at ACM KDD, 2017, held in Halifax, Nova Scotia, Canada	
Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain  Mayank Kejriwal	May 2017
DSMM Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	
Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages Rahul Kapoor, <b>Mayank Kejriwal</b> , Pedro Szekely	May 2017
GeoRich Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	
Supervised Typing of Big Graphs using Semantic Embeddings  Mayank Kejriwal, Pedro Szekely	May 2017
Semantic Big Data (SBD) Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	
Information Extraction in Illicit Domains	Apr. 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	Jun. 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	Oct. 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  Mayank Kejriwal, Daniel P. Miranker	Oct. 2015
The 14 <sup>th</sup> International Semantic Web Conference, held in Bethlehem, Pennsylvania	
An Unsupervised Instance Matcher for Schema-free RDF Data	Jul. 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 12 <sup>th</sup> European Semantic Web Conference, held in Portoroz, Slovenia	
	Semi-supervised Instance Matching using Boosted Classifiers	May 2015
	Mayank Kejriwal, Daniel P. Miranker	may 2015
	The 12 <sup>th</sup> European Semantic Web Conference, held in Portoroz, Slovenia	
	Entity Resolution in a Big Data Framework	Jan. 2015
	Mayank Kejriwal	
	Doctoral consortium, the 29th Conference on Artificial Intelligence (AAAI), held in Austin, TX	
	Populating Entity Name Systems for Big Data Integration	Oct. 2014
	Mayank Kejriwal	
	The 13 <sup>th</sup> International Semantic Web Conference, held in Riva Del Garda, Italy	
	A Two Stan Blacking Schame Lagran for Scalable Link Discovery	Oct. 2014
	A Two-Step Blocking Scheme Learner for Scalable Link Discovery  Mayonk Kairiyad and Daniel B. Mirankor	Oct. 2014
	<b>Mayank Kejriwal</b> and Daniel P. Miranker The 9 <sup>th</sup> International Workshop on Ontology Matching at the 13 <sup>th</sup> International Semantic Web	
	Conference, held in Riva Del Garda, Italy	
	conference, neta in tital bei daraa, italy	
	Schema Matching over Relations, Attributes and Data Values	Jul. 2014
	Aibo Tian, <b>Mayank Kejriwal</b> and Daniel P. Miranker	
	The 26 <sup>th</sup> International Conference on Scientific and Statistical Database Management, held in	
	Aalborg, Denmark	
	An Unsupervised Algorithm for Learning Blocking Schemes	Dec. 2013
	Mayank Kejriwal and Daniel P. Miranker	
	The 13 <sup>th</sup> IEEE International Conference on Data Mining, held in Dallas, Texas	
	Extended Scaled Neural Predictor for Improved Branch Prediction	Aug. 2013
	Zihao Zhou, <b>Mayank Kejriwal</b> 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	Oct. 2012
	Liana Diesendruck, Luigi Marini, Rob Kooper, <b>Mayank Kejriwal</b> and Kenton McHenry	Oct. 2012
	The 8 <sup>th</sup> IEEE International Conference on eScience, held in Chicago, Illinois	
	The office international conference on concrete, field in chicago, initios	
	Digitization and search: A non-traditional use of HPC	Oct. 2012
	Liana Diesendruck, Luigi Marini, Rob Kooper, <b>Mayank Kejriwal</b> and Kenton McHenry	
	The 8th IEEE International Conference on eScience, held in Chicago, Illinois	
ΑĒ	SSTRACTS, POSTERS, NEWSLETTERS AND PRESS	
	Crisis Management: Using Artificial Intelligence to help save lives	Dec. 2019
	Article in Research Outreach, Issue 111	
	Article Link	
	Featured Post on Computing Community Consortium (CCC) Website	Nov. 2019
	Co-LOD: Continuous Space Linked Open Data	
	Article Link	
	Computing Community Conserting (CCC) Blog	Nov. 2010
	Computing Community Consortium (CCC) Blog  Great Innovative Idea: Co. LOD: Continuous Space Linked Open Data	Nov. 2019
	Great Innovative Idea: Co-LOD: Continuous Space Linked Open Data Post by Helen Wright	
	Post Link	
	TOOLERIN.	
	Interview	Oct. 2019
	365 Data Science	· - <del></del>

Interview Link

Featured Interview ISI quarterly newsletter	Aug. 2019
Measuring without labels: a different approach to information extraction  SpringerOpen invited blog post  Article Link	Jul. 2019
Mayank Kejriwal, 2019 Copper Black Award winner Press release by Mensa Foundation Article Link	Jun. 2019
Ep 50: Artificial Intelligence – Fighting Human Trafficking Folksalert podcast episode featuring Mayank Kejriwal Podcast Link	Apr. 2019
myDIG: A system for building domain-specific search engines Contributed article to encyclopedia.pub Entry Link	Mar. 2019
Let's embed everything! Featured post on Open Data Science Article Link	Feb. 2019
Video Interview on AI for Social Good Pioneer Ventures: AI Frontiers Video Link	Nov. 2018
Projects featured in SoCal DB Day talk Talk by Shahram Ghandeharizadeh (USC) SoCal DB 2018 Link	Oct. 2018
Technology for Good: Fighting Human Trafficking with Artificial Intelligence Invited piece written by Mayank Kejriwal IVY Magazine Article Link	Aug. 2018
Making Waves - ONDA News Featured on Patron Spotlight	Jul. 2018
Fighting Human Traffickers Press feature written by Lori Cameron IEEE Intelligent Systems Article Link	Jun. 2018
Building Knowledge Graphs for Social Good  USC Center for Artificial intelligence in Society Seminar Summary by Nicole Wilson Summary Link	Apr. 2018
Breaking the Cycle of Victimization Press feature written by Marc Ballon USC Viterbi Magazine Article Link	Apr. 2018
Always Lurking: Understanding and Mitigating Bias in Online Human Trafficking Detection  Kyle Hundman, Thamme Gowda, <b>Mayank Kejriwal</b> and Benedikt Boecking  Poster presented at AAAI/ACM Conference on AI, Ethics and Society (AIES), 2018, held in New Orleans, Louisiana	Feb. 2018
FlagIt: A System for Minimally Supervised Human Trafficking Indicator Mining  Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar and Pedro Szekely	Dec. 2017

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

Aug. 2017

Article Link

Semi-automatic Data Integration using Karma

Dec. 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

Jun. 2017

Mayank Kejriwal

Dissertation abstract in AI Matters

Authored piece on Semantic Web published on the AI Topics website

Apr.2017

**Article Link** 

 $\label{prop:condition} \textit{Authored piece on Games and AI published on the AI Topics website}$ 

Apr. 2017

**Article Link** 

End Human Trafficking Hackathon

Oct. 2016

Hackathon was featured in NY Daily News; served as mentor to students

The Summer of Data Science

Oct. 2015

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

Populating a Linked Data Entity Name System

Aug. 2015

Mayank Kejriwal, Daniel P. Miranker

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

 ${\it Unsupervised\ Instance\ Matching\ on\ Schema-free\ Linked\ Data}$ 

Aug. 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 12<sup>th</sup> European Semantic Web Conference, held in Portoroz, Slovenia

The Math Behind...The Web of Linked Data

Mar. 2015

Mayank Kejriwal

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

A Sorted Neighborhood Workflow for the Semantic Web

Jan. 2015

Mayank Kejriwal and Daniel P. Miranker

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

On Linking Heterogeneous Dataset Collections

Oct. 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

Oct. 2014

Mayank Kejriwal and Daniel P. Miranker

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

An Unsupervised Algorithm for Learning Blocking Schemes

Dec. 2013

Mayank Kejriwal and Daniel P. Miranker

Poster at the 13  $^{\rm th}$  IEEE International Conference on Data Mining, held in Dallas, Texas

 ${\it Extended Scaled Neural Predictor for Improved Branch Prediction}$ 

Aug. 2013

Zihao Zhou, Mayank Kejriwal and Risto Miikkulainen

Poster at the IEEE International Conference on Neural Networks, held in Dallas, Texas	
Distriction and Course. A New Traditional Use of UDC	0+ 2012
Digitization and Search: A Non-Traditional Use of HPC	Oct. 2012
Liana Diesendruck, Luigi Marini, Rob Kooper, <b>Mayank Kejriwal</b> and Kenton McHenry	
Poster and abstract at the 8 <sup>th</sup> IEEE International Conference on eScience, held in Chicago, Illinois	
Toward Free and Searchable Historical Census Images	Sep. 2011
Kenton McHenry, Luigi Marini, <b>Mayank Kejriwal</b> , Rob Kooper and Peter Bajcsy	эср. 1911
Published as an article in the Electronic Imaging & Signal Processing section by the	
International Society for Optics and Photonics	
Article Link	
<ul> <li>Published as a technical article in infoDOCKET</li> </ul>	
Article Link	
TECHNICAL REPORTS	
A Pipeline for Post-Crisis Twitter Data Acquisition	Jan. 2018
Mayank Kejriwal, Yao Gu	
Technical Report (arXiv: 1801.05881)	
100111100111001110110110110110110110110	
Unsupervised Hashtag Retrieval and Visualization for Crisis Informatics	Jan. 2018
Yao Gu, <b>Mayank Kejriwal</b>	34 2020
Technical Report (arXiv: 1801.05906)	
reclinical hepote (arxiv: 1001.05500)	
FlagIt: A System for Minimally Supervised Human Trafficking Indicator Mining	Dec. 2017
Mayank Kejriwal, Jiayuan Ding, Rungi Shao, Anoop Kumar and Pedro Szekely	
Technical Report (arXiv: 1712.03086)	
Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain	Apr. 2017
Mayank Kejriwal	•
Technical Report (arXiv:1704.05571)	
,	
Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages	Apr. 2017
Rahul Kapoor, <b>Mayank Kejriwal</b> and Pedro Szekely	
Technical Report (arXiv:1704.05569)	
Supervised Typing of Big Graphs using Semantic Embeddings	Mar. 2017
Mayank Kejriwal and Pedro Szekely	
Technical Report (arXiv:1703.07805)	
,	
Information Extraction in Illicit Domains	Mar. 2017
Mayank Kejriwal and Pedro Szekely	
Technical Report (arXiv:1703.03097)	
,	
Experience: Type alignment on DBpedia and Freebase	Aug. 2016
Mayank Kejriwal and Daniel P. Miranker	
Technical Report (arXiv:1608.04442)	
. common report (arxii:120000 · · · 12)	
Self-contained NoSQL Resources for Cross-Domain RDF	Aug. 2016
Mayank Keiriwal and Daniel P. Miranker	
Technical Report (arXiv:1608.04437)	
and the same of th	
On the Complexity of Sorted Neighborhood	Jan. 2015
Mayank Kejriwal and Daniel P. Miranker	
Technical Report (arXiv:1501.01696)	
A DNF Blocking Scheme Learner for Heterogeneous Datasets	Jan. 2015
Mayank Kejriwal and Daniel P. Miranker	34 2013
Technical Report (arXiv:1501.01694)	
recrimed report (draw.1301.01037)	

N-Way Heterogeneous Blocking  Mayank Kejriwal and Daniel P. Miranker	Feb. 2014
Regular Technical Report (TR-14-06), University of Texas at Austin	
TALKS	
Using Artificial Intelligence to assist law enforcement to crack down on human trafficking Keynote talk at the Telesign and Data Skeptic Meetup in Marina del Rey, California	Feb. 2020
Fighting Child Sex Trafficking with Artificial Intelligence Keston talk at the ISI institute-wide retreat in Redondo Beach, California	Jan. 2020
Fighting Human Trafficking with Technology Invited talk at the National University for Juridical Sciences (NUJS) in Kolkata, India	Dec. 2019
Knowledge Graphs: An Accessible and Applied Overview Invited talk at Purdue University in West Lafayette, Indiana	Nov. 2019
EMI: Embed, Measure and Iterate Invited talk at Open Data Science Conference (ODSC-West) in San Francisco, California	Nov. 2019
Artificial Intelligence Invited outreach talk at the California Institution for Men in Chino, California	Nov. 2019
Is a Knowledge Graph right for me? Invited talk at the IDEAS Southern California Conference held in Los Angeles, California	Oct. 2019
AI, Networks and Society Invited Micro-seminar at the USC Annenberg School of Communication	Sep. 2019
Executive Briefing: An Age of Embeddings Invited talk at O'Reilly AI Conference in San Jose, California	Sep. 2019
Low-supervision urgency detection and transfer in short crisis messages The IEEE/ACM ASONAM Conference in Vancouver, Canada	Aug. 2019
Concept Drift in Bias and Sensationalism Detection: An Experimental Study The IEEE/ACM ASONAM Conference in Vancouver, Canada	Aug. 2019
Why should I build a knowledge graph? Invited talk at the Global Big Data Conference, San Jose	Aug. 2019
Data Science Education Invited talk at the Data Science Conference, Boston	May 2019
Applying Noisy Knowledge Graphs to Real Problems Invited talk at the DataWorks Summit, Washington, DC	May 2019
Let's embed everything! Invited talk at ODSC East, Boston	May 2019
Fighting Human Trafficking with AI Invited talk at Texas AI Summit	Jan. 2019
Let's embed everything! Invited talk at Data Day Texas	Jan. 2019
Behavioral Interview Seminar for Graduate Students USC Information Sciences Institute	Nov. 2018
Applying Noisy Knowledge Graphs to Real Problems	Nov. 2018

Invited talk at Home Depot in Atlanta, Georgia

Knowledge Graphs: A Lingua Franca for Humans and Machines? Invited workshop talk at Open Data Science Conference (ODSC-West) in San Francisco, California	Nov. 2018
Structured Event Entity Resolution in Humanitarian Domains The 17 <sup>th</sup> International Semantic Web Conference, held in Monterrey, California	Oct. 2018
Fighting Human Trafficking with AI Invited talk at O'Reilly AI Conference in San Francisco, California	Sep. 2018
Technology-assisted Investigative Search: A Case Study from an Illicit Domain Talk at the ACM CHI Conference on Human Factors in Computing Systems in Montreal, Canada	Apr. 2018
Building Knowledge Graphs for Social Good Spring Seminar Series, USC Center for Artificial Intelligence in Society (CAIS)	Mar. 2018
The Many Face(t)s of Knowledge Graphs: In Vivo vs. In Vitro Research Breakfast Seminar Series, USC Information Sciences Institute	Feb. 2018
Building Advanced Search and Analytics Engines over Arbitrary DomainsWithout a Data Scientist Invited speaker at Data Day Texas	Jan. 2018
Building Domain-specific Search Engines for Investigative Decision Support Invited seminar presentation: USC Department of Industrial and Systems Engineering	Jan. 2018
On the Future of the Semantic Web Invited presentation at the Digital Turn in Comparative Constitutionalism Workshop, held in Hannover, Germany	Dec. 2017
Neural Embeddings for Populated Geonames Locations International Semantic Web Conference, held in Vienna, Austria	Oct. 2017
An Investigative Search Engine for the Human Trafficking Domain International Semantic Web Conference, held in Vienna, Austria	Oct. 2017
From Noisy Information Extraction to Rich Information Retrieval in Unusual Domains NLP Seminar, USC Information Sciences Institute	Jun. 2017
Predicting Role Relevance with Minimal Domain Expertise in a Financial Domain DSMM Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	May 2017
Using Contexts and Constraints for Improved Geotagging of Human Trafficking Webpages GeoRich Workshop at ACM SIGMOD, 2017, held in Chicago, Illinois	May 2017
Populating a Linked Data Entity Name System Ph.D. Final Defense, University of Texas at Austin Committee: Daniel P. Miranker (chair), Raymond Mooney, Joydeep Ghosh, Risto Miikkulainen and Eric Price	Apr. 2016
Populating a Linked Data Entity Name System Al Seminar: Interview Talk USC Information Sciences Institute	Apr. 2016
Decision-making Bias in Instance Matching Model Selection The 14 <sup>th</sup> International Semantic Web Conference, held in Bethlehem, Pennsylvania	Oct. 2015
Sorted Neighborhood for Schema-free RDF Data The 4 <sup>th</sup> Knowledge Discovery and Data Mining meets Linked Open Data workshop, The 12 <sup>th</sup> European Semantic Web Conference, held in Portoroz, Slovenia	May 2015

Semi-supervised Instance Matching using Boosted Classifiers The 12 <sup>th</sup> European Semantic Web Conference, held in Portoroz, Slovenia	May 2015
Entity Resolution in a Big Data Framework  Doctoral consortium, the 29 <sup>th</sup> Conference on Artificial Intelligence (AAAI)	Jan. 2015
Populating a Linked Data-based Entity Name System Ph.D. Oral Proposal, University of Texas at Austin Committee: Daniel P. Miranker (chair), Raymond Mooney, Joydeep Ghosh, Risto Miikkulainen and Eric Price	Nov. 2014
Populating Entity Name Systems for Big Data Integration The 13 <sup>th</sup> International Semantic Web Conference, held in Riva Del Garda, Italy	Oct. 2014
A Two-Step Blocking Scheme Learner for Scalable Link Discovery  The 9 <sup>th</sup> International Workshop on Ontology Matching at the 13 <sup>th</sup> International Semantic Web  Conference, held in Riva Del Garda, Italy	Oct. 2014
Populating an Entity Name System  Research Preparation Exam, University of Texas at Austin  Committee: Daniel P. Miranker (chair), Greg Plaxton and Pradeep Ravikumar	Mar. 2014
An Unsupervised Algorithm for Learning Blocking Schemes The 13 <sup>th</sup> IEEE International Conference on Data Mining, held in Dallas, Texas	Dec. 2013
Machine Learning Techniques for Offline Handwriting Transcription Undergraduate honors thesis presentation at the University of Illinois at Urbana-Champaign	Dec. 2012