

Shyam Upadhyay

<http://www.shyamupa.com>

last updated: May 8, 2021

Contact	Email: shyamupa@google.com , shyamupa@gmail.com Address: 111 8th Avenue, New York 10011, NY, United States.	
Employment History	Senior Research Scientist Google Assistant Team Google Research, New York City, New York	May 2021 - present
	Research Scientist Google Assistant Team Google Research, New York City, New York	April 2019 - April 2021
	Research Assistant University of Pennsylvania (2017 - 2019) University of Illinois at Urbana-Champaign (2013 - 2017) ADVISOR: Dan Roth	August 2013 - February 2019
Education	Ph.D. in Computer Science University of Pennsylvania (2017 - 2019) University of Illinois at Urbana-Champaign (2013 - 2017) TITLE: Exploiting Cross-lingual Representations for Natural Language Processing ADVISOR: Dan Roth COMMITTEE: Adam Kalai (ext.), Chris Callison-Burch, Lyle Ungar, Mitchell P. Marcus	2013 - 2019
	B.Tech. in Computer Science and Engineering Indian Institute of Technology Kanpur, Uttar Pradesh, India	2009 - 2013
Research Interests	Natural Language Processing, Machine Learning, Conversational NLP, Multilingual NLP, Representation Learning	
Research Internships	Summer Intern Google Research, Mountain View, California MENTORS: Larry Heck, Gokhan Tür and Dilek Hakkani-Tür Worked on developing slot filling models for new languages with little training data.	May 2017 - August 2017
	Summer Intern Microsoft Research, Cambridge, Massachusetts MENTORS: Adam Kalai, Matt Taddy Worked on developing multi-sense word embeddings using multilingual context.	May 2016 - August 2016
	Summer Intern Microsoft Research, Redmond, Washington MENTOR: Ming-Wei Chang Worked on solving algebra word problems using implicit supervision.	May 2015 - August 2015
	Summer Intern Microsoft Research, Redmond, Washington MENTORS: Bongshin Lee, Geoffrey Zweig, Sumit Gulwani	May 2012 - July 2012

Conference
Publications

1. **TIMEDIAL: Temporal Commonsense Reasoning in Dialog**
Lianhui Qin, Aditya Gupta, Shyam Upadhyay, Luheng He, Yejin Choi, and Manaal Faruqui
In ACL (Long Paper), 2021.
2. **A Dataset for Understanding Disfluencies in Question Answering**
Aditya Gupta, Jiacheng Xu, Shyam Upadhyay, Diyi Yang, and Manaal Faruqui
In Findings of ACL (Long Paper), 2021.
3. **A General-Purpose Algorithm for Constrained Sequential Inference**
Daniel Deutsch*, Shyam Upadhyay*, and Dan Roth (*=equal contribution)
In CoNLL (Long Paper), 2019.
4. **Combining Discourse Markers and Cross-Lingual Embeddings for Synonym-Antonym Classification**
Michael Roth and Shyam Upadhyay
NAACL (Short Paper), 2019.
5. **Bootstrapping Transliteration with Constrained Discovery for Low-Resource Languages**
Shyam Upadhyay, Jordan Kodner, and Dan Roth
EMNLP (Long Paper), 2018 [link](#) (acceptance rate 26%).
6. **Joint Multilingual Supervision for Cross-Lingual Entity Linking**
Shyam Upadhyay, Nitish Gupta, and Dan Roth
EMNLP (Long Paper), 2018 [link](#) (acceptance rate 26%).
7. **Robust Cross-Lingual Hypernymy Detection Using Dependency Context**
Shyam Upadhyay*, Yogarshi Vyas*, Marine Carpuat, and Dan Roth (*=equal contribution)
NAACL (Long Paper), 2018 [link](#) (acceptance rate 32%).
8. **Looking Beyond the Surface: A Challenge Set For Reading Comprehension over Multiple Sentences**
Daniel Khashabi, Snigdha Chaturvedi, Michael Roth, Shyam Upadhyay, and Dan Roth
NAACL (Long Paper), 2018 [link](#) (acceptance rate 32%).
9. **(Almost) Zero-Shot Cross-Lingual Spoken Language Understanding**
Shyam Upadhyay, Manaal Faruqui, Gokhan Tür, Dilek Hakkani-Tür, and Larry Heck
ICASSP (Long Paper), 2018 [link](#).
10. **CogcompNLP: Your Swiss Army Knife for NLP**
Daniel Khashabi, Christos Christodoulopoulos, Shyam Upadhyay, et al.
LREC (Long Paper), 2018 [link](#).
11. **Annotating Derivations: A New Evaluation Strategy and Dataset for Algebra Word Problems**
Shyam Upadhyay and Ming-Wei Chang
EACL (Long Paper), 2017 [link](#) (acceptance rate 27%).
12. **Revisiting the Evaluation for Cross Document Event Coreference**
Shyam Upadhyay, Nitish Gupta, Christos Christodoulopoulos, and Dan Roth
COLING (Long Paper), 2016 [link](#) (acceptance rate 32%).
13. **Learning from Explicit and Implicit Supervision Jointly for Algebra Word Problems**
Shyam Upadhyay, Ming-Wei Chang, Kai-Wei Chang, and Wen-tau Yih.
EMNLP (Long Paper), 2016 [link](#) (acceptance rate 26%).
14. **Cross-Lingual Models of Word Embeddings: An Empirical Comparison**
Shyam Upadhyay, Manaal Faruqui, Chris Dyer, and Dan Roth.
ACL (Long Paper), 2016 [link](#) (acceptance rate 28%).

15. **Equation Parsing: Mapping Sentences to Grounded Equations**
Subhro Roy, Shyam Upadhyay, and Dan Roth.
EMNLP (Long Paper), 2016 [link](#) (acceptance rate 26%).
16. **Cross-Lingual Dataless Classification for Many Languages**
Yangqiu Song, Shyam Upadhyay, Haoruo Peng, and Dan Roth.
IJCAI (Long Paper), 2016 [link](#) (acceptance rate 24%).
17. **Structural Learning with Amortized Inference**
Kai-Wei Chang, Shyam Upadhyay, Gourab Kundu, and Dan Roth.
AAAI (Long Paper), 2015 [link](#) (acceptance rate 27%).

Journal Publications

Toward Any-language Zero-shot Topic Classification of Textual Documents
Yangqiu Song, Shyam Upadhyay, Haoruo Peng, Stephen Mayhew, and Dan Roth.
Artificial Intelligence Journal, 2019.

Workshop Publications

1. **Beyond Bilingual: Multi-Sense Word Embeddings Using Multilingual Context**
Shyam Upadhyay, Kai-Wei Chang, Matt Taddy, Adam Kalai, and James Zou.
In Workshop on Repl4NLP, 2017. (**Best Paper Award**) [link](#).
2. **“Making the News”: Identifying Noteworthy Events in News Articles**
Shyam Upadhyay, Christos Christodoulopoulos and Dan Roth.
In 4th Workshop on Events at NAACL, 2016 [link](#).

Software

1. **IllinoisSL: A JAVA Library For Structured Prediction**
Kai-Wei Chang, Shyam Upadhyay, Ming-Wei Chang, Vivek Srikumar, and Dan Roth.
Arxiv Preprint, Vol. abs/1509.07179, 2015 [link](#).
2. **CogcompNLP: Your Swiss Army Knife for NLP**
Daniel Khashabi, Christos Christodoulopoulos, Shyam Upadhyay, et al.
In LREC, 2018 [link](#).

Visit my [github profile](#) for other software contributions.

Awards and Achievements

1. Selected to attend Heidelberg Laureate Forum, Heidelberg, Germany in 2019.
2. One of the **Top Reviewers** at ACL 2018.
3. **Best Paper Award** at Repl4NLP Workshop 2017.
4. **Academic Excellence Award** (2010, 2011, 2012) Awarded by the Director, IIT Kanpur for distinctive academic performance.
5. **3rd** rank in the All India Engineering Entrance Examination (AIEEE) 2009, among more than 10,00,000 participants nationwide.
6. **113th** rank in the Joint Entrance Examination organized by the IIT schools (IIT-JEE) 2009, among more than 4,00,000 participants nationwide.
7. **Kishore Vaigyanik Protsahan Yojana Fellowship**, 2008 ([link](#)) Awarded by the Department of Science and Technology, Govt. of India to less than 200 students to promote interest in basic sciences.
8. **National Talent Search Exam Scholarship**, 2007 Scholarship awarded by the National Council Of Educational Research And Training, Govt. of India.

Professional Service

- Area Chair (Information Extraction Track) for EMNLP-IJCNLP 2019
- Area Chair (Multilinguality Track) for *SEM 2020
- Area Chair for AAAI 2021
- Area Chair (Multilinguality Track) for NAACL-HLT 2021
- Reviewer for ACL: 2017, 2018 (one of the [Top Reviewers](#)), 2019, 2020.
- Reviewer for AACL-IJCNLP: 2020
- Reviewer for EMNLP: 2017, 2018
- Reviewer for NAACL: 2018
- Reviewer for CoNLL: 2019, 2020
- Reviewer for *SEM: 2017, 2019
- Reviewer for AAAI: 2016
- Reviewer for IJCAI: 2016, 2019
- Reviewer for NAACL SRW 2018
- Reviewer for ACL WiNLP 2019
- Reviewer for Gen-Deep Workshop 2018
- Reviewer for ACM Transactions on Information Systems 2018

Invited Talks

TITLE: Learning with Less Supervision in a Multilingual World

- Google Research, New York City, USA.
- Bloomberg AI, New York City, USA.
- Allen Institute for Artificial Intelligence (AI2) ([link to talk](#)), Seattle, USA.
- Uber AI Labs, San Francisco, USA.
- Amazon Research, Sunnyvale, USA.
- Samsung Research America, Mountain View, USA.
- Forum Entwicklung und Anwendung von Sprach-Technologien ([FEAST](#)) seminar. Saarbrücken, Germany.

Conference Talks

- Joint Multilingual Supervision for Cross-Lingual Entity Linking
EMNLP, Brussels, Belgium, 2018 ([link](#)).
- Robust Cross-Lingual Hypernymy Detection Using Dependency Context
NAACL, New Orleans, Louisiana, USA, 2018 ([link](#)).
- (Almost) Zero-Shot Cross-Lingual Spoken Language Understanding
ICASSP, Calgary, Alberta, Canada, 2018.
- Learning from Explicit and Implicit Supervision Jointly For Algebra Word Problems
EMNLP, Austin, Texas, USA, 2016 ([link](#)).
- Cross-Lingual Models of Word Embeddings: An Empirical Comparison
ACL, Berlin, Germany, 2016 ([link](#)).

Teaching

- Guest Lecturer Spring 2019
COURSE: CIS 530 - Computational Linguistics
LECTURE TITLE: Cross-lingual Word Representations
INSTRUCTOR: Chris Callison-Burch
University of Pennsylvania
- Teaching Assistant Fall 2017
COURSE: CIS 700 - Advanced Machine Learning for Natural Language Processing
INSTRUCTOR: Dan Roth
University of Pennsylvania
- Teaching Assistant Fall 2015
COURSE: CS446 - Machine Learning
INSTRUCTOR: Dan Roth
University of Illinois at Urbana-Champaign