

Arvind Neelakantan

140 Governors Drive, Amherst, MA 01003-9264 • arvind@cs.umass.edu • <http://people.cs.umass.edu/~arvind/>

Education

University of Massachusetts, School of Computer Science PhD in Computer Science Advised by Professor Andrew McCallum	Amherst, MA Sept 2013-present
Columbia University, Fu Foundation School of Engineering & Applied Science Master of Science in Computer Science; Machine Learning Track Advised by Professor Michael Collins	New York, NY May 2013
National Institute of Technology (NIT), Trichy (formerly Regional Engineering College, Trichy) Bachelor of Technology (B.Tech) in Computer Science and Engineering	Trichy, India May 2011

Experience

Google Brain Research Intern	Mountain View, CA August 2016 – November 2016
Google Brain Research Intern	Mountain View, CA June 2015 – February 2016
Microsoft Research Research Intern	Redmond, WA June 2014 – August 2014
University of Southern California, Information Sciences Institute Research Intern	Los Angeles, CA June 2013 – August 2013
Raytheon BBN Technologies Corp., Speech, Language and Multimedia Technologies Graduate Intern	Cambridge, MA May 2012 – Aug 2012
Indian Institute of Technology, Madras Research Assistant	Chennai, India May 2011 – July 2011
University of Southern California, Signal Analysis and Interpretation Lab Research Assistant	Los Angeles, CA May 2010 – June 2010

Awards

- Google PhD Fellowship in Machine Learning, 2016
- Outstanding Paper Award, Workshop on Automated Knowledge Base Construction (AKBC) at NIPS, 2014
- Yahoo! Award for Accomplishments in Search and Mining, 2014-2015

Publications

- Arvind Neelakantan, Quoc V. Le, Martin Abadi, Andrew McCallum and Dario Amodei. “Learning a Natural Language Interface with Neural Programmer”. International Conference on Learning Representations (ICLR), 2017.
- Rajarshi Das, Arvind Neelakantan, David Belanger and Andrew McCallum. “Chains of Reasoning over Entities, Relations, and Text using Recurrent Neural Networks”. European Chapter of the Association for Computational Linguistics (EACL), 2017.
- Patrick Verga, Arvind Neelakantan and Andrew McCallum. “Generalizing to Unseen Entities and Entity Pairs with Row-less Universal Schema”. European Chapter of the Association for Computational Linguistics (EACL), 2017.
- Kathy McKeown, Hal Daume, Snigdha Chaturvedi, John Paparrizos, Kapil Thadani, Pablo Barrio, Or Biran, Suvarna Bothe, Michael Collins, Kenneth R Fleischmann, Luis Gravano, Rahul Jha, Ben King, Kevin McInerney, Taesun Moon, Arvind Neelakantan, Diarmuid O’Seaghdha, Dragomir Radev, Clay Templeton and Simone Teufel. “Predicting the impact of scientific concepts using full text features”. Journal of the Association for Information Science and Technology, 2016.
- Arvind Neelakantan, Quoc V. Le and Ilya Sutskever. “Neural Programmer: Inducing Latent Programs With Gradient Descent”. International Conference on Learning Representations (ICLR), 2016.

6. Arvind Neelakantan*, Luke Vilnis*, Quoc V. Le, Ilya Sutskever, Lukasz Kaiser, Karol Kurach and James Martens. “Adding Gradient Noise Improves Learning for Very Deep Networks”. International Conference on Learning Representations Workshop (ICLR Workshop), 2016.
7. Arvind Neelakantan, Benjamin Roth and Andrew McCallum. “Compositional Vector Space Models for Knowledge Base Completion”. Association for Computational Linguistics (ACL), 2015.
8. Arvind Neelakantan and Ming-Wei Chang. “Inferring Missing Entity Type Instances for Knowledge Base Completion: New Dataset and Methods”. North American Chapter of the Association for Computational Linguistics (NAACL), 2015.
9. Arvind Neelakantan, Benjamin Roth and Andrew McCallum. “Knowledge Base Completion using Compositional Vector Space Models”. In Workshop on Automated Knowledge Base Construction (AKBC) 2014 at Neural Information Processing Systems.
10. Arvind Neelakantan*, Jeevan Shankar*, Alexandre Passos and Andrew McCallum. “Efficient Non-parametric Estimation of Multiple Embeddings per Word in Vector Space”. Empirical Methods in Natural Language Processing (EMNLP), 2014.
11. Arvind Neelakantan, Alexandre Passos and Andrew McCallum. “A Hierarchical Model for Universal Schema Relation Extraction”. In Workshop on Automatic Creation and Curation of Knowledge Bases (WACCK-2014) at SIGMOD.
12. Arvind Neelakantan and Michael Collins. “Learning Dictionaries for Named Entity Recognition using Minimal Supervision”. European Chapter of the Association for Computational Linguistics (EACL), 2014.
13. Rohit Prasad, Rohit Kumar, Sankaranarayanan Ananthakrishnan, Wei Chen, Sanjika Hewavitharana, Matthew Roy, Frederick Choi, Aaron Challenner, Enoch Kan, Arvind Neelakantan and Prem Natarajan. “Active Error Detection and Resolution for Speech-to-Speech Translation”. International Workshop on Spoken Language Translation, 2012.

Talks

1. OpenAI, 2016
2. Stanford University, 2016
3. Association for Computational Linguistics (ACL), 2015
4. Association for the Advancement of Artificial Intelligence Spring Symposium on Knowledge Representation and Reasoning: Integrating Symbolic and Neural Approaches, 2015
5. Workshop on Automated Knowledge Base Construction (AKBC) at Neural Information Processing Systems, 2014
6. Empirical Methods in Natural Language Processing (EMNLP), 2014
7. University of Washington Seattle, 2014
8. Workshop on Automatic Creation and Curation of Knowledge Bases, 2014
9. European Chapter of the Association for Computational Linguistics (EACL), 2014

Service

Organizing Committee

First Neural Abstract Machines & Program Induction Workshop at Neural Information Processing Systems, 2016

Program Committee

International Conference on Machine Learning (ICML), Empirical Methods in Natural Language Processing (EMNLP), Association for Computational Linguistics (ACL) and North American Chapter of the Association for Computational Linguistics (NAACL)

References

Available upon request.