

Samira Abnar <https://staff.fnwi.uva.nl/s.abnar/>

Ph.D Student in Language and Cognition
Institute for Logic Language and Computation
University of Amsterdam

Phone: +31626622383
Email: s.abnar@uva.nl
Address: Room F2.22, Science Park 107,
Amstertsdam, Netherlands

"I am a PhD student at university of Amsterdam. In my research I am investigating the capability of deep learning models to accomplish linguistic tasks at human level, eg. communication in a multi-modal environment (vision and language)."

Research Interests

- Cognitive Science, Neural Networks and Deep Learning, Cognitive Linguistics, Digital Humanities, Machine Learning, Graph Mining, Data Mining, Computational Psychology

Education

- Ph.D. student at Institute for Logic Language and Computation (ILLC), University of Amsterdam [February 2016-now]
 - Topic: The emergence and evolution of compositionality and linguistic structure in a population of deep neural networks. Under supervision of Dr Willem Zuidema and Prof. Rens Bod
- M.Sc. Computer Science, Intelligent Information Systems Lab, University of Tehran [February 2012-January 2015]
 - Thesis Title: Plagiarism Detection in Persian Documents (Under supervision of Dr Azadeh Shakery). See [1] [2] and [3]
- B.S. Computer Engineering, University of Tehran [September 2007-September 2011]
 - Thesis Title: Designing and Implementing a System for forming and evaluating groups of students for collaborative learning in a web-based environment (Under supervision of Dr Fataneh Taghiyareh). See [4].

Research Experience

February 2015 – now PhD student at Institute for Logic Language and Computation

- Study the capability of deep neural networks in generalization/over generalization in the context of the image caption generation task.
- Building communicating neural networks and study the properties of the emerged language and how it evolves.
- Employing glove word embeddings for Neurolinguistic Decoding.
- Study the effect of adding an attention layer to an LSTM for the sentiment analysis task.
- Investigating the relationship between the sentences and their negated form in a sentence embedding space, where sentence embeddings are computed using a recursive neural network trained for sentiment analysis.

- February 2012 Researcher at Intelligent Information System Lab
August 2014 *During my master, I was a researcher at Intelligent Information Systems Lab at University of Tehran. I was mainly responsible to work on the topic of Plagiarism Detection, but I was involved in other text mining research.*
- October 2010 Researcher at Multi-Agent Systems Lab
October 2011 *During Last year of my bachelor study, I was a researcher at Multi-Agent Systems Lab at University of Tehran. I worked with the e-learning group and my concentration was to develop algorithms for grouping students based on their social and personal characteristics.*

Other Experience

- Tutor at the ABC summer school on “Computational Modelling & Cognitive Development”, Spring 2016
- Part time developer at Soroush HighTech¹: October 2011-October 2013
*Main responsibility: Java developer in the backend team.
Temporary responsibility: PHP and Javascript developer in the front-end team.*
- Teaching Assistant:
 - Data Mining, University of Tehran, Spring 2014
 - Information Retrieval, University of Tehran, Fall 2013
 - Advanced Programming, University of Tehran, Spring 2011 | Fall 2009 | Spring 2009
 - Logic Circuits, University of Tehran, Spring 2009
- Participating in RoboCup competitions: Summer 2004 - Spring 2005

Technical Qualifications

- Excellent Coding skills (*Java, C + +, Python*)
- Strong ability to work with deep learning libraries and frameworks (Theano, high level libraries with theano/tensor flow backend such as keras)
- Experienced working with Natural Language Processing tools (Core NLP, NLTK)
- Experienced working with machine learning tools (*Weka, RankLib, SVM^{Rank}*)
- Experienced working with Graph Mining tools (Gephi)
- Familiar with Agile Development Frameworks (Scrum)

¹ <http://soroush.net/En>

Awards and Honors

- Student volunteer grant for attending *Conference on Neural Information Processing Systems 2016*, Spain. *European Conference on Information Retrieval 2015*, Austria.
- Student Travel grant for attending *The ACM International Conference on Information and Knowledge Management*, USA. *Autumn School for Information Retrieval and Information Foraging 2015*, Germany. *Conference and Lab of the Evaluation Forum 2014*, United Kingdom.
- Exempt from M.Sc. university entrance exam as an exceptionally talented student. Each year only top 10% of graduating B.S. students are allowed to continue their studying as a graduate student in their own major without participating in M.Sc. university entrance exam.
- Ranked 418th in National University Entrance Examination in Iran among about 1,500,000 participants.
- Selected as a talented student to participate in NODET schools. About the 2.5% top graded participants are admitted to enter NODET schools.

Publications

- [1] Mostafa Dehghani, **Samira Abnar** , and J. Kamps. "[The Healing Power of Poison: Helpful Non-relevant Documents in Feedback](#)", In proceedings of The ACM International Conference on Information and Knowledge Management (CIKM'16), 2016.
- [2] **Samira Abnar**, M. Dehghani, and A. Shakery, "[Meta Text Aligner: Text Alignment Based on Predicted Plagiarism Relation](#)", CLEF 2015.
- [3] **Samira Abnar**, M. Dehghani, H. Zamani, and A. Shakery, "[Expanded N-Grams for Semantic Text Alignment](#)", Notebook for PAN at CLEF 2014
- [4] H. Zamani, H. N. Esfahani, P. Babaie, **Samira Abnar**, M. Dehghani, and A. Shakery. (2014). "[Authorship Identification Using Dynamic Selection of Features from Probabilistic Feature Set](#)", CLEF 2014.
- [5] **Samira Abnar**, F. Orooji, and F. Taghiyareh, "[An evolutionary algorithm for forming mixed groups of learners in web-based collaborative learning environments](#)", ICTEE 2012.

References

available upon request.