

CONTACT

E-Mail n.saphra@ed.ac.uk
Website nsaphra.github.io

EDUCATION

University of Edinburgh Ongoing
Ph.D. Informatics
Supervisor: Adam Lopez
Johns Hopkins University 2015
MSE Computer Science
Carnegie Mellon University 2013
B.Sc Computer Science with Language Technologies minor
The Recurse Center Spring 2017
Sabbatical: Recurser
Experimental unstructured educational programming retreat.

RESEARCH EXPERIENCE

Johns Hopkins University 2013-2015
Research Assistant
Supervisors: Raman Arora, Adam Lopez, and Sanjeev Khudanpur.
Worked on normalization and representation of informal language text.
Carnegie Mellon University 2010-2013
Undergraduate Research Assistant
Supervisors: Chris Dyer and Noah Smith.
Projects included tweet dependency parsing; multithreaded language models; political corpus analysis.
CLSP Summer Workshop at Johns Hopkins University 2012
Undergraduate Research Fellow
Supervisor: Matthew Blaschko.
Developed unsupervised learning methods to verify and explore image annotations from Mechanical Turk.
Selected from a competitive undergraduate pool.

INDUSTRY EXPERIENCE

Koko Summer 2017
Contractor
Developed neural classifiers for informal text at NYC startup.
Google Summer 2015
Software Engineering Intern
Supervisor: Marius Pasca (Common Sense Team, Machine Intelligence).
Unsupervised discovery of paraphrases of complex compositional noun phrases.
Google Summer 2013
Software Engineering Intern
Supervisor: Eric Altendorf (Common Sense Team, Machine Intelligence).
Integrated models of real-world knowledge into entity linking systems as an active feedback mechanism.
Facebook, Inc. Summer 2011
Engineering Intern
Supervisor: Jen Burge (Engagement Team).
Engineered and tested new features for the People You May Know model.

PUBLICATIONS

- Saphra, Naomi and Adam Lopez (2019). "Understanding Learning Dynamics Of Language Models with SVCCA". In: *Proc. of NAACL*.
- Saphra, Naomi and Adam Lopez (2018). "Language Models Learn POS First (Work in Progress)". In: *Analyzing and interpreting neural networks for NLP workshop*.
- Neubig, Graham and others (2017). *DyNet: The Dynamic Neural Network Toolkit*.
- Saphra, Naomi and Adam Lopez (2016). "Evaluating Informal-Domain Word Representations With UrbanDictionary". In: *The First Workshop on Evaluating Vector Space Representations for NLP*.
- Saphra, Naomi and Raman Arora (2015). "Domain Adaptation for Word Embeddings With Matrix Factorization". In: *Women in Machine Learning Workshop at NIPS*.
- Saphra, Naomi and Adam Lopez (2015). "AMRICA: an AMR Inspector for Cross-language Alignments". In: *Proc. of NAACL*.
- Cotterell, Ryan, Adithya Renduchintala, Naomi Saphra, and Chris Callison-Burch (2014). "An Algerian Arabic-French Code-Switched Corpus". In: *Workshop on Free/Open-Source Arabic Corpora*.
- Schneider, Nathan, Brendan O'Connor, Naomi Saphra, David Bamman, Manaal Faruqui, Noah A. Smith, Chris Dyer, and Jason Baldridge (2014). "A framework for (under) specifying dependency syntax without overloading annotators". In: *Linguistic Annotation Workshop*.
- Vedaldi, Andrea et al. (2014). "Understanding Objects in Detail with Fine-grained Attributes." In: *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*.
- Blaschko, Matthew et al. (2012). *Towards a detailed understanding of objects and scenes in natural images*. Tech. rep.
- Saphra, Naomi and Matthew Blaschko (2012). "Automatic verification of boundary annotations from mechanical turk". In: *Women in Machine Learning Workshop at NIPS*.

TEACHING

University of Edinburgh

2016-present

Tutor

Informatics Research Review; Probabilistic Modeling & Reasoning; Machine Learning & Pattern Recognition

Johns Hopkins University

2013

Course Assistant

Natural Language Processing

Irvington High School

2008-2009

Teacher's Assistant

Ancient Greek

SERVICE

Auld Reekie Roller Derby

Communications committee.

ACL 2014

Student social co-chair.

North American Computational Linguistics Olympiad 2014

Puzzle tester and local organizer.

Carnegie Mellon TechNights

Teacher of programming and computer science outreach classes for middle school girls.

AWARDS

Google Europe Scholarship for Students with Disabilities 2017.

Carnegie Mellon School of Computer Science Dragon Award 2013.

National Merit Semifinalist 2009.

Nannina Rasulo Memorial Scholarship Award for Technology 2009.