n.saphra@ed.ac.uk

nsaphra.github.io

Naomi Saphra

EDUCATION

University of Edinburgh   Ongoing
Ph.D. Informatics
    Supervisors: Adam Lopez and Tim Hospedales

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). "Sparsity Emerges Naturally in Neural Language Models". In: *ICML Workshop on Identifying and Understanding Deep Learning Phenomena.*

Saphra, Naomi and Adam Lopez (2019). "Understanding Learning Dynamics Of Language Models with SVCCA". In: *NAACL.*

Neubig, Graham et al. (2017). *DyNet: The Dynamic Neural Network Toolkit.*

Saphra, Naomi and Adam Lopez (2016). "Evaluating Informal-Domain Word Representations With UrbanDictionary". In: *ACL 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: *NAACL.*

Cotterell, Ryan, Adithya Renduchintala, Naomi Saphra, and Chris Callison-Burch (2014). "An Algerian Arabic-French Code-Switched Corpus". In: *LREC 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: *ACL 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).*

Saphra, Naomi and Matthew Blaschko (2012). "Automatic verification of boundary annotations from mechanical turk". In: *Women in Machine Learning Workshop at NIPS.*

AWARDS

Daniella Sciama Award for Achievement through Adversity 2019.
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.

INVITED TALKS

Blackbox NLP Panel Discussion   Aug 1, 2019
ACL Blackbox NLP Workshop
    Florence, Italy

 Learning Dynamics of Language Models   May 28, 2019
City University of New York
    New York, New York

Paying the Panopticon (standup)   Feb 26, 2019
The Stand Edinburgh Comedy Club
    Edinburgh, UK

Learning Dynamics of Text Models With SVCCA   Jan 25, 2019
University of Amsterdam
    Amsterdam, Netherlands

TEACHING

University of Edinburgh   2016-
Tutor
> Informatics Research Review (2016)
> Probabilistic Modeling & Reasoning (2019)
> Machine Learning & Pattern Recognition (2017, 2018, 2019)

Johns Hopkins University   2013
Course Assistant
> Natural Language Processing

Irvington High School   2008-2009
Teacher's Assistant
> Ancient Greek

SERVICE

Radical Utopian Sci-Fi Enclave (RUSE) co-organizer (2019-)
> Organize monthly department political sci-fi book club.

Staff Pride Network disability representative (2019-)
> Representative for disabled students in school-wide LGBTQ+ network.

ILCC Cookie Czar (2017-)
> Organize weekly department social event.

Edinburgh ML4NLP Reading Group (2018-)
> Organize and lead weekly reading group.

Auld Reekie Roller Derby (2018-2019)
> Communications committee.

Association for Compuational Linguistics (ACL) 2014
> Student social co-chair.

North American Computational Linguistics Olympiad (2012-2014)
> Puzzle tester and local organizer.

Carnegie Mellon TechNights 2012
> Taught machine learning and NLP classes for middle school girls in CS outreach program.

SERVICE (REVIEWING)

- EMNLP
- NAACL
- NeurIPS (secondary)
- BlackboxNLP Workshop
- RepEval NLP Workshop
- Learning With Limited Data Workshop
- Women in Machine Learning Workshop
- Widening NLP Workshop