NAOMI SAPHRA

Natural Language Processing / Machine Learning PhD Student

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EXPERIENCE

Research Intern
Google

📅 Winter 2020   📍 New York, New York

- Supervisors: Dipanjan Das (Language, Google AI), Ian Tenney, Jasmijn Bastings, Thibault Sellam.

Contractor
Koko

📅 Summer 2017   📍 New York, New York

- Developed neural classifiers for informal text at anti-abuse startup.

Software Engineering Intern
Google

📅 Summer 2015   📍 Mountain View, California

- Supervisor: Marius Pasca (Common Sense, Machine Intelligence).
- Unsupervised discovery of paraphrases of compositional noun phrases.

Software Engineering Intern
Google

📅 Summer 2013   📍 Mountain View, California

- Supervisor: Eric Altendorf (Common Sense, Machine Intelligence).
- Integrated models of real-world knowledge into entity linking.

Undergraduate Research Fellow
CLSP Summer Workshop at Johns Hopkins University

📅 Summer 2012   📍 Baltimore, Maryland

- Supervisor: Matthew Blaschko.
- Unsupervised methods to verify image annotations.

Engineering Intern
Facebook

📅 Summer 2011   📍 Palo Alto, California

- Supervisor: Jen Burge (Engagement Team).
- Engineered new features for the People You May Know model.

Undergraduate Research Assistant
Carnegie Mellon University

📅 2010 – 2013   📍 Pittsburgh, Pennsylvania

- Supervisors: Chris Dyer and Noah Smith.
- Twitter dependency parsing; multithreaded language models; &c.

EDUCATION

Ph.D. in Informatics
Edinburgh University

📅 Ongoing

Supervisor: Adam Lopez.
Thesis: Learning dynamics of NLP models.

M.Sc. in Computer Science
Johns Hopkins University

📅 2015

B.Sc. in Computer Science
Carnegie Mellon University

📅 2013

Minor in Language Technologies

Sabbatical
The Recurse Center

📅 2017

Unstructured programming retreat.

AWARDS

- New York Academy of Sciences - Natural Language, Dialogue and Speech Symposium: Best Poster Runner Up
- 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.

SKILLS & HOBBIES

Python   C++   Julia   pytorch
dynet   keras   bokeh   numpy

NLP   informal text   interpretability

Roller Derby   Tea Society   Standup
Radical Utopian Scifi Enclave

SELECTED PUBLICATIONS

👥 Conference Proceedings

- Saphra, Naomi and Adam Lopez (2019). "Understanding Learning Dynamics Of Language Models with SVCCA". in: *NAACL*.
- Saphra, Naomi and Adam Lopez (2015). "AMRICA: an AMR Inspector for Cross-language Alignments". In: *NAACL*.
- Vedaldi, Andrea et al. (2014). "Understanding Objects in Detail with Fine-grained Attributes." In: *CVPR*.

👥 Workshop Proceedings

- 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 Lopez, Adam (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*.
- Cotterell, Ryan et al. (2014). "An Algerian Arabic-French Code-Switched Corpus". In: *LREC Workshop on Free/Open-Source Arabic Corpora*.
- Schneider, Nathan et al. (2014). "A framework for (under) specifying dependency syntax without overloading annotators". In: *ACL Linguistic Annotation Workshop*.
- Saphra, Naomi and Matthew Blaschko (2012). "Automatic verification of boundary annotations from mechanical turk". In: *Women in Machine Learning Workshop at NIPS*.

SERVICE

Organizing Committee.
6th Workshop on Representation Learning for NLP
📅 2021

ACL Accessibility Subcommittee
Association for Computational Linguistics
📅 2020 　　　　📍 Seattle, WA

ML4NLP Reading Group Organizer
Edinburgh University
📅 2018 – 2019 　　　📍 Edinburgh, UK

Communications committee
Auld Reekie Roller Derby
📅 2017 – 2019 　　　📍 Edinburgh, UK

Student social co-chair
ACL
📅 2014 　　　　📍 Baltimore, Maryland

Puzzle tester and local organizer
North American Computational Linguistics Olympiad
📅 2012 – 2014

NLP/ML Instructor & Course Designer
Carnegie Mellon TechNights (outreach for middle school girls)
📅 2013 　　　　📍 Pittsburgh, Pennsylvania

TEACHING

Tutor
University of Edinburgh
📅 2016 – 2019

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

Course Assistant
Johns Hopkins University
📅 2013

Natural Language Processing

Teacher's Assistant
Irvington High School
📅 2008 – 2009

Ancient Greek

INVITED TALKS

Transparent, Hackable, Accessible
QueerInAI EMNLP Social
📅 November 2020 　　📍 Remote (EMNLP Conference)

Learning Dynamics of LSTMs
NLP with Friends
📅 October 21, 2020 　📍 Remote

Accessible Means Hackable
Pydatafest Amsterdam
📅 June 15, 2020 　　📍 Amsterdam, Netherlands

Learning Dynamics of Language Models
Brown University
📅 May 28, 2020 　　📍 Providence, RI

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

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

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