SHERIDAN FEUCHT

First-Year Computer Science PhD student at Northeastern University linkedin.com/in/sheridan-feucht \diamond github.com/sfeucht

EDUCATION

Bachelor of Science in Computer Science, Brown University, GPA: 4.0

May 2023

Selected Coursework: Logic in Language and Mind, Language Processing in Humans and Machines, Syntax, Psycholinguistics, Pattern Theory, Information Theory, Functional Programming (Racket, ReasonML), Software Engineering (Java), Systems (C, x86 Assembly)

RESEARCH EXPERIENCE

Brown University LUNAR Lab - Undergraduate Researcher

Feb 2022 - September 2023

- Evaluating CNN, ResNet, and ViT performance classifying same-different relations between two shapes in an image, determining whether model can generalize to unseen shapes (See **Publication 1**).
- Collecting human data on Amazon MTurk to compare with model performance on image classification tasks

Brown University AI Lab - Undergraduate Researcher

Feb - Dec 2021

- Used LDA topic modeling to sample news articles from CNN/DailyMail
- Collected and validated human annotations on Amazon MTurk for 3000 sampled news articles
- Fine-tuned language models on corpus of newly-collected data
- Presented this work to Brown AI and ML Labs and as a Findings paper at ACL 2022 (see Publication 2)

Brown University Sloman Lab - Research Assistant

Mar 2020 - Jul 2021

- Developed a new manual for syntactic and discourse-level annotation of documents
- Annotated human- and computer-generated documents to create a corpus of online discourse
- Presented on this work as a poster at CogSci 2021 (see Publications 3, 4)

University of Calgary de Koning Lab - Research Assistant

Jul 2018 - Jun 2019

• Simulated spread of genetic mutations in populations on computing cluster using Linux/Slurm

PUBLICATIONS AND PRESENTATIONS

- 1. Alexa R. Tartaglini*, Sheridan Feucht*, Michael A. Lepori, Wai Keen Vong, Charles Lovering, Brenden M. Lake, and Ellie Pavlick. Deep Neural Networks Can Learn Generalizable Same-Different Visual Relations. arXiv preprint. 2023. (*Equal contribution.)
- 2. Seyed Ali Bahrainian*, Sheridan Feucht*, and Carsten Eickhoff. NEWTS: A Corpus for News Topic-Focused Summarization. Findings of the Association for Computational Linguistics. 2022. (*Equal contribution.)
- 3. Sheridan Feucht, Babak Hemmatian, Rachel Avram, Alexander Wey, Muskaan Garg, Kate Spitalnic, Carsten Eickhoff, Ellie Pavlick, Bjorn Sandstede, Steven Sloman. The Anatomy of Discourse: Linguistic Predictors of Narrative and Argument Quality Motivation (Poster). 43rd Annual Meeting of the Cog. Science Society. 2021.
- 4. Babak Hemmatian, Sheridan Feucht, Rachel Avram, Alexander Wey, Muskaan Garg, Kate Spitalnic, Carsten Eickhoff, Ellie Pavlick, Bjorn Sandstede, Steven Sloman. A Novel Corpus of Discourse Structure in Humans and Computers. The 2nd Workshop on Computational Approaches to Discourse at EMNLP. 2021.

WORK EXPERIENCE

Brown University - Undergraduate Teaching Assistant (Ghanaian Drumming)

Jan - May 2022

• Leading weekly rehearsals, teaching students Ghanaian drumming, dancing, and singing.

- Assisting Prof. Kwaku Kwaakye (Martin) Obeng in weekly classes.
- Meeting with students one-on-one to work through musical concepts.

Brown University - Undergraduate Teaching Assistant (Computational Linguistics)

Sep - Dec 2022

- Developed assignment on machine translation, making students put together their own Transformer model
- Assisted in developing assignments on topic modeling, BERT finetuning, and dependency parsing
- Held office hours to explain NLP concepts to students and help them debug their assignments

Brown University - Undergraduate Teaching Assistant (Introduction to Music Theory)

Sep - Dec 2022

- Assisting lecture section for MUSC 0400A (Introduction to Music Theory) with Professor Andrew Welch.
- Holding office hours to help students with sight-singing, musical notation, and composition.
- Assisting in administrative tasks and answering student questions.

Brown University - Undergraduate Teaching Assistant (Intro. to Computer Systems)

Sep - Dec 2021

- Held conceptual office hours to answer student questions on course concepts (e.g. procedure calls and stack frames, memory/heap management, concurrent programming)
- Held code-based office hours to help students debug their assignment code (C, x86 Assembly)

Shaw Communications - Data Strategy Summer Student

May - Aug 2020

- Queried, validated, and investigated company data to increase understanding of consumer behavior
- Wrote stored procedures and views in SQL to help implement foundational pipelines