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Education

2021 - · · · Ph.D., Cornell University - Computer Science, minor Information Science

Advisors: Prof. Thorsten Joachims, Prof. Emma Pierson

Research interests: human-AI collaboration, decision auditing, interpretability, fairness and trust, ethics

2019 – 2021 D M.S., University of Washington Seattle - Computer Science

Thesis: An Interactive UI to Support Sensemaking over Collections of Parallel Texts [4].

Advisor: Prof. Dan Weld Cumulative GPA 3.93 / 4.0

 $Highlighted\ coursework:\ Natural\ Language\ Processing,\ Adv.\ Topics\ in\ Human-Computer\ Interaction,\ Deep$

Learning, Social Computing, Operating Systems, Programming Languages, Computer Security

2016 – 2019 B.S., University of Washington Seattle - Computer Science, minor Mathematics

Thesis: Finding and evaluating RNA motifs with CMfinder [5].

Advisor: Prof. Larry Ruzzo

Cumulative GPA 3.94 / 4.0, magna cum laude, 2x Annual Dean's List

Highlighted coursework: Machine Learning, Software Design & Implementation, Data Structures & Parallelism, Data Visualization, Algorithms, Databases, Systems Programming, Computational Biology

Started 2 years early through the Robinson Center UW Academy program.

Research Experience

2022 - · · · · **GMSE Researcher** with NIST, mentored by Thurston Sexton.

2020 – 2021 Degraduate Researcher with Prof. Elena Glassman (Harvard) and Prof. Dan Weld (UW).

Developed an interactive, human-AI collaborative aggregation and visualization method for sensemaking content in research paper abstracts.

Wrote up methods and design process in Master's thesis (readable as preprint paper) [4].

2019 – 2021 Degraduate Researcher, Lab for Human-AI Interaction (University of Washington)

Mentored by Gagan Bansal and advised by Prof. Dan Weld.

Developed, implemented, and evaluated a novel adaptive explanation style for human-AI teams on a sentiment analysis task. Analyzed participants' feedback on how AI explanations impacted their decision-making. Resulted in 2nd-author CHI publication [1]. Also featured in a WHI 2020 spotlight.

2018 − 2019 Degraduate Researcher with Prof. Larry Ruzzo (University of Washington)

Developed a set of tools (*blockmerge* and *crosscompare*) and a pipeline centered on CMfinder to search for potentially structured fRNA sequences across alignment block boundaries and cluster found covariance models. Wrote up methods and findings in Bachelor's thesis [5].

Teaching Experience

Taught sections of 20+ students and assisted individual students in office hours.

Wrote and reviewed course handouts, homework, and exams.

Graded student programming assignments and exams.

2021 SU: CSE333 Systems Programming (Cosmo Wang)

2021 SP: CSE374 Programming Tools & Concepts (Dr. Megan Hazen)

2021 WI: CSE417 Algorithms & Computational Complexity (Prof. Robbie Weber)

2019 AU: CSE374 Programming Tools & Concepts (Tyler Pirtle)

2019 SP: CSE369 Introduction to Digital Design (Prof. Justin Hsia)

2019 WI: CSE369 Introduction to Digital Design (Prof. Justin Hsia)

2018 AU: CSE331 Software Design & Implementation (Prof. Mike Ernst)

2018 SU: CSE331 Software Design & Implementation (Leah Perlmutter)

Publications

* denotes equal contribution; + denotes significant contribution

Conference and Journal Papers

[1] G. Bansal*, T. Wu*, **J. Zhou**+, R. Fok+, B. Nushi, E. Kamar, M. T. Ribeiro, and D. S. Weld, "Does the whole exceed its parts? The effect of AI explanations on complementary team performance", CHI 2021. arXiv: 2006.14779 [cs.AI]. [Online]. Available: https://arxiv.org/abs/2006.14779.

Workshops and Posters

- [2] **J. Zhou** and T. Joachims, *How to explain and justify almost any decision: Potential pitfalls for accountability in AI decision-making*, IJCAI 2nd Workshop on Adverse Impacts and Collateral Effects of Artificial Intelligence Technologies (AIofAI) 2022.

Preprints

- [4] **J. Zhou**, E. Glassman, and D. S. Weld, "An interactive UI to support sensemaking over collections of parallel texts", Master's thesis, 2021.
- [5] **J. Zhou** and L. Ruzzo, "Finding and evaluating RNA motifs with CMfinder", Bachelor's thesis, 2019, **6** [Online]. Available: https://cephcyn.github.io/pub/2019-bachelors_thesis.pdf.

Honors & Awards

- 2021 > **GFSD fellow** (formerly known as NPSC)
- 2018 Phi Beta Kappa, honor society, top 10%, focus on liberal arts and sciences.

Service

Workshop Program Committees

2022 Workshop on Human-Machine Collaboration and Teaming (HMCaT), ICML 2022

▶ Workshop on Trust and Reliance in AI-Human Teams (TRAIT), CHI 2022