Yifei Zhou

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EDUCATION

Cornell University **Aug.2020 - May.2023** (Expected)

Bachelor of Arts in Computer Science and Mathematics Ithaca, NY

- Current GPA: 4.12/4.0
- Pauline and Irvine Tanner Dean's Scholar Scholarship (40/2000+)

Selected Papers

Yifei Zhou, ZIlu Li, Abhinav Shrivastava, Hengshuang Zhao, Antonio Torralba, Taipeng Tian, Ser-Nam Lim, BT^2: Backward Compatible Training with Basis Transformation. Under Review CVPR 2023.

Yuda Song*, **Yifei Zhou*** (* equal contribution), Ayush Sekhari, Drew Bagnell, Akshay Krishnamurthy, Wen Sun, Hybrid RL: Using both offline and online data can make RL efficient, Under Review ICLR 2023.

Yifei Zhou, Renyu Li, Hayden Housen, Ser-Nam Lim, "GAPX: Generalized Autoregressive Paraphrase-identification X" , NeurIPS 2022.

Yifei Zhou, Yansong Feng, "Improve Discourse Dependency Parsing with Contextualized Representations" , Findings of NAACL 2022.

EXPERIENCE

Meta AI x University of Maryland May.2022 - Sep.2022

Research Intern Ithaca, NY

- Work under UMD-Meta SRA contract.
- Work on the backward compatibility problem that exists in large-scale visual information retrieval system of Meta AI, advised by Dr. Ser-Nam Lim.
- Propose a novel orthogonal solution through a series learnable change of basis to achieve backward compatibility without hurting the performance of the new model.
- Paper with first-authorship submitted to CVPR 2023.

Cornell University Artificial Intelligence (CUAI) Sep.2021 - Present

Co-President Ithaca, NY

- Focus on undergraduate machine learning research and education.
- Recruit new members and supervise research for 16 top CS (acceptance rate 5%) undergraduate at Cornell.
- Drive undergraduate-led machine learning research to be published in top conferences like NeurIPS and ICML, in collaboration with Meta AI.

Machine Learning at Cornell May.2022 - Aug.2022

CSURP Research Intern Ithaca, NY

- Prove that a computationally efficient Fitted Q Iteration style algorithm can solve many fundamental reinforcement learning settings like Linear Bellman Completeness with polynomial sample complexity, which cannot be guaranteed by any existing pure online and offline reinforcement learning algorithms
- Paper with co-first-authorship submitted to ICLR 2023.

Cornell Bowers Computing and Information Science Jan.2022 - May.2022

Part-time Academic Teaching Assistant Ithaca, NY

- Teaching Assistant for CS 4670 Intro to Computer Vision by prof. Bharath Hariharan.
- Design and grade assignments.

SKILLS

Languages : English, Chinese

Programming Languages : Python (proficient), Java (proficient), C (intermediate), Ocaml (intermediate)

Tools : Pytorch, Lightning, Tensorflow, OpenCV, LaTex, Transformers