

Yuchen Wang

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EDUCATION

Indiana University, Bloomington, Indiana, USA

Ph.D. in Intelligent Systems Engineering with minor in Statistical Science 08/2017-10/2024

M.S. in Computer Science 08/2015-05/2017

Tongji University, Shanghai, China

B.S. in Software Engineering 09/2007-06/2011

WORK EXPERIENCE

Meta

- Senior Machine Learning Engineer 08/2025-Present

Led end-to-end development of Facebook's connected and unconnected Feed ranking systems and LLM-driven content discovery frameworks, managing large-scale recommendation engines for 1.8B+ monthly active users (MAU) to shape global creator reach and user experience strategy.

Developed advanced content-quality classifiers to detect inauthentic and coordinated engagement, significantly bolstering platform safety and securing **~\$5M in annualized payout savings** by prioritizing high-standard content.

Pioneered an agent-centric architecture that transitioned traditional deep learning ranking pipelines to LLM-based reasoning for natural language preference processing; this Agentic Recommendation System delivered a **+20% NDCG@10 boost** over MemRec and a **+108% improvement** over memory-less LLMs.

- Machine Learning Engineer 02/2024-08/2025

Own end-to-end Feed Ranking optimization (retrieval → early ranking → Pass1 VM/models), delivering measurable lifts in DAU, Revenue, Session, Time Spent and user engagement. Define the experimentation roadmap (boost/demotion), run 100M-scale A/B tests, and iterate distribution policies to increase users and engagement across the platform.

- Machine Learning Engineer Intern 06/2022-09/2022

Utilize user data to enhance the Sourcing and Ranking algorithm for the "Instagram Reels Creation Trends" section achieving an average improvement of 10% normalized entropy.

Baidu

08/2021-12/2021

- Self-Driving Researcher Intern

Analyze failed lane-change cases using datasets including NGSIM, HighD, Waymo, and internal logs, and develop advanced lane-change planning and prediction algorithms that surpass the performance of the prior rule-based model.

SELECTED PUBLICATIONS

- Yuchen Wang***, Zhao, Ziwei*, and Chuhua Wang. "Fusing personal and environmental cues for identification and segmentation of first-person camera wearers in third-person views." Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024.
- Yuchen Wang***, Chuhua Wang*, Mingze Xu, David Crandall. Stepwise Goal-Driven Networks for Trajectory Prediction. IEEE Robotics and Automation Letters (RA-L), 2022 with ICRA 2022 (win 3rd place on nuScenes prediction task at 6th AI Driving Olympics, ICRA 2021).
- Ego4D: Around the World in 3,000 Hours of Egocentric Video. Collaborate with Facebook AI Research. IEEE Conference on Computer Vision and Pattern Recognition, 2022 (Oral).