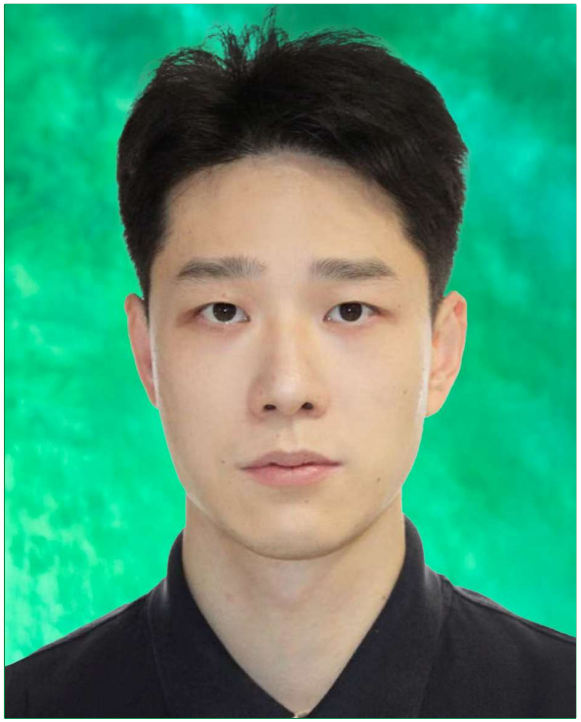
About Me



NAME

Dr. Yang Zhang

TITLE

Assistant Professor

Department of Data Science

RESEARCH FOCUS AREAS

- LLMs and grounded agent memory
- Graph learning and recommender systems
- Federated and privacy-preserving learning
- Robotics and Physical AI

ACADEMIC TRAINING

Dual Ph.D.

Computer Science, Macquarie University
Information Science, Wuhan University

My research: adaptive intelligence

AI that uses evidence, adapts to people, and interacts with the world

Grounded memory

Recover precise evidence from long histories

LLMs, visual retrieval, multimodal reasoning

Personalized decisions

Choose the next action for a user's needs

Graph learning, recommendation, reinforcement learning

Physical AI

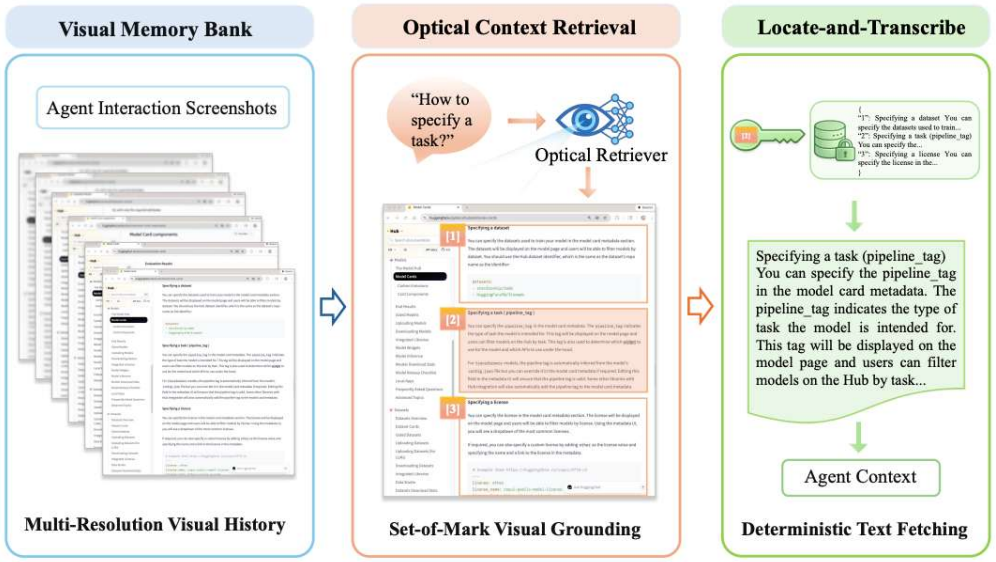
Connect human sensing with robot interaction

Humanoid robots, geometric learning, world models

Grounded memory for AI agents

OCR-Memory

Select evidence visually, then recover the original text



46.1%

Mind2Web step success
41.4% with ACON

82 vs. 256

Average visual tokens
Dynamic vs. high resolution

ACL 2026

Personalized decisions for complex needs

STAR

Sequential service recommendation

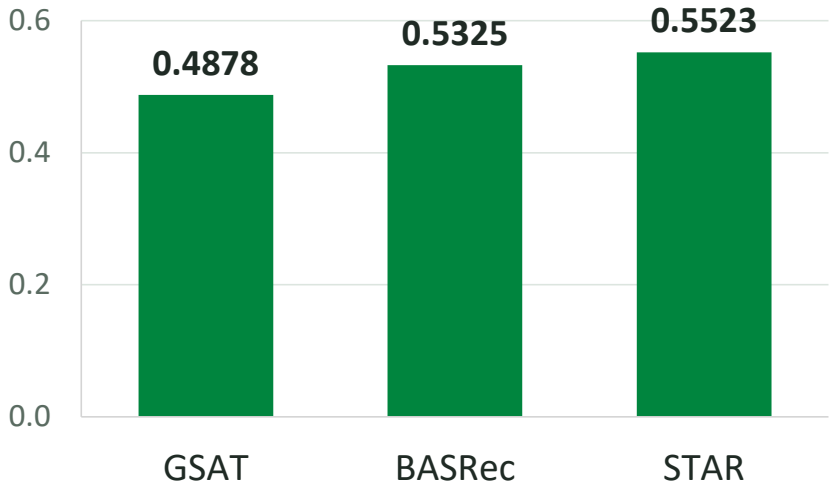
Each selection updates the requirements that remain to be satisfied.

Graph representations of services
Residual requirement updates
Actor–critic policy learning

Related work

Multimodal recommendation and efficient federated personalization

Recall@10 on ProgrammableWeb

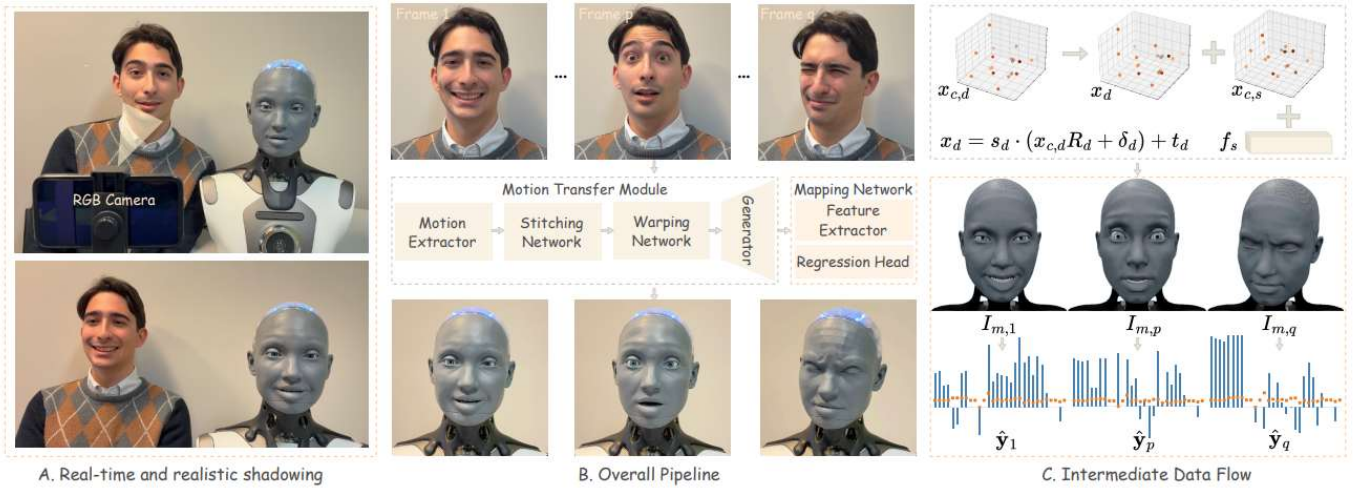


IEEE Transactions on Services Computing

Physical AI and human–robot interaction

VividFace

Real-time facial expression shadowing for humanoid robots



A. Real-time and realistic shadowing

B. Overall Pipeline

C. Intermediate Data Flow

0.05 s

Response latency
ICRA 2026

Next: memory-grounded Physical AI

Human sensing, personalized decisions, stable world models