

PLAN-FM

Bridging Planning and Reasoning in Natural Language with Foundational Models

Organizers: Harsha Kokel, Shirin Sohrabi, Soham Dan, Manling Li, Yu Su

Advisors: Biplav Srivastava, Sriraam Natarajan, Subbarao Khambampati



Organizers



Harsha Kokel
IBM Research



Shirin Sohrabi
IBM Research



Soham Dan
Microsoft



Manling Li
Northwestern University



Yu Su
Ohio State University

Logistics

- Updated schedule on <https://plan-fm.github.io>
- **Speakers**, Submit your slides to <https://aaai-25-slides-upload.paperform.co/>
- **Students**, Register for Lunch-with-a-mentor
 - Roaster of mentors is provided
 - Each mentor will have maximum 3 students
 - You can opt for one mentor only
 - First-come first-serve basis
- You can drop a question for the panel discussion at any time

Program

9:00 – 10:30

Opening Remarks

Tutorial: Planning,
LLMs, and
Benchmarks

11:00 – 12:30

Tutorial: Embodied
Agents

Contributed Talk:
Generic-to-Specific Reasoning and
Learning for Ad Hoc Teamwork
L2P: A Python Toolkit for Automated
PDDL Model Generation with Large
Language Models

Invited Talk:
Michael Katz

Lunch with a mentor

1:55 – 3:30

Contributed Talk:
FixMyPlan: Leveraging Large
Language Models to Fix Ill-Defined
Models and Incorrect Plans
From Semantic Understanding to
Geometric Features: Using
Foundation Models for Novel
Robotic Tasks

Invited Talks:
Mak Roberts
Karen Myers










Contributed Talk:
Towards a More Rigorous PDDL
Generation Benchmark, or, `(:goal`
`(benchmark pddl_generators))`

4:00 – 5:00

Panel

Closing Remarks

Tutorial Agenda

9:10 – 9:30		AI Planning	 Shirin Sohrabi <i>IBM Research</i>
9:30 – 9:50		LLMs	 Soham Dan <i>Microsoft</i>
10:00 – 10:30		Benchmarks	 Harsha Koke1 <i>IBM Research</i>
10:30 – 11:00		Coffee Break	
11:00 – 11:40		Embodied Agents	 Manling Li <i>Northwestern University</i>

Why this Bridge?

My AI Agent: AI's Role In Transforming Investing For Everyone

By [Lawrence Wintermeyer](#), Contributor

[Language Processing, Machine Learning](#)

AI Agents Simulate 1,052 Individuals' Personalities with Impressive Accuracy

Scholars hope these generative agents based on real-life interviews can solve society's toughest problems.

TECH

OpenAI launches Deep Research, a ChatGPT tool that promises 'expert-level' analysis in minutes

[Effie Webb](#) Feb 3, 2025, 6:25 AM PT

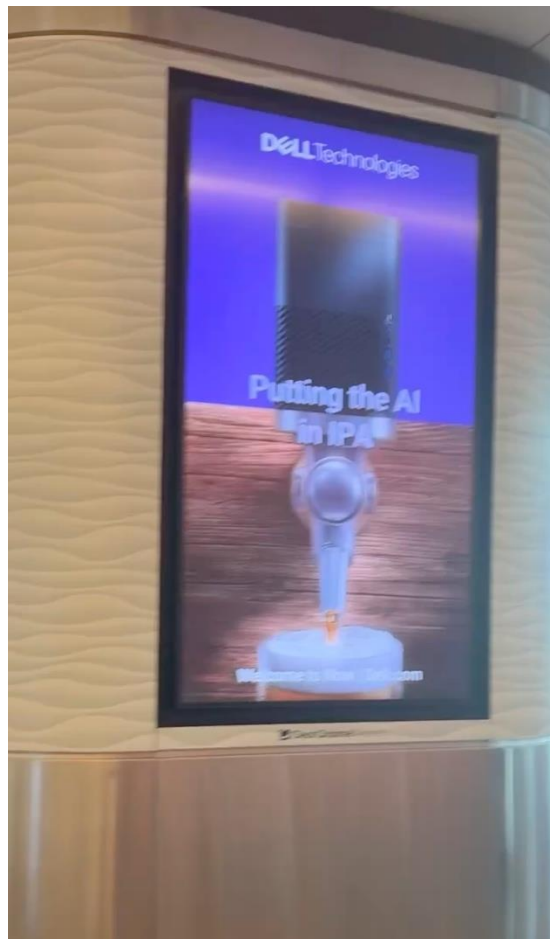
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ChatGPT Can Now Complete a Major Task That Would Take a Human Up to 30 Days. Here's How it Works.

The AI now has the capability to browse the Internet and write a research paper based on what it finds.

BY [SHERIN SHIBU](#) EDITED BY [MELISSA MALAMUT](#) FEB 3, 2025

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Despite its impressive output, generative AI doesn't have a coherent understanding of the world

Researchers show that even the best-performing large language models don't form a true model of the world and its rules, and can therefore fail unexpectedly on similar tasks.

Adam Zewe | MIT News
November 5, 2024

GenAI still lacks 'coherent understanding of the world': MIT, Harvard researchers

LLMs have shown that they can excel at various things – but the researchers found significant flaws in the system.

2024.07.56 AM EST

Futurism

Attorney Pleads for Mercy After Using AI in Court, Where It Made Up Fake Lawsuits

Frank Landymore

Sat, February 15, 2025 at 3:00 AM PST · 3 min read



The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers

Planning Reasoning in Natural Language

- Foster interactions between NLP, Planning and Robotics researchers
- Provide a platform to discuss and exchange ideas
- Identify opportunities and pinpoint critical challenges

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