

Embodied AI:

Robots that perceive,
act, and collaborate.



Our goal is to create a community of researchers who understand how each of the components of Embodied AI interact with each other to create new technologies with novel applications. This emerging expertise is needed because the synthesis of machine learning, computer vision, robotics and language technologies presents new challenges, new opportunities, and new capabilities that do not exist when the components are considered independently.

MISSION

To develop and deploy embodied learning models and methods related to locomotion and manipulation, navigation and object interaction, instruction following, and human-robot dialogue.

ABOUT

Embodied AI is the integration of machine learning, computer vision, robotics and language technologies, culminating in the “embodiment” of artificial intelligence: robots that can see, do, think and act.

Key faculty members focused on Embodied AI include:

- [Yonatan Bisk](#)
Language Technologies Institute + Robotics Institute Courtesy
- [Katerina Fragkiadaki](#)
Machine Learning Department + Robotics Institute Courtesy
- [Deepak Pathak](#)
Robotics Institute + Machine Learning Department Affiliate
- [Ruslan Salakhutdinov](#)
Machine Learning Department



Perceiving | Acting | Collaborating

PARTNERSHIP OPPORTUNITIES

We invite industry partners to join us in exploring research areas including:

- locomotion and manipulation,
- navigation and object interaction,
- instruction following, and
- human-robot dialogue.

PARTNERSHIP BENEFITS

- Sponsored research — capstone projects
- Sponsored co-advising
- Sponsorship of a colloquium series
- Student internships
- Visiting scholar
- Demo Days
- Early access to research results
- Recruitment

PUBLICATIONS

We have published many papers.

They are posted on our web pages listed below:

- [Yonatan Bisk](#)
- [Katerina Fragkiadaki](#)
- [Deepak Pathak](#)
- [Ruslan Salakhutdinov](#)

EXAMPLE COURSES

- [Deep Reinforcement Learning & Control](#)
- [On-Device Machine Learning](#)
- [Multimodal Machine Learning](#)
- [Deep Learning for Robotics](#)
- Advanced Deep Learning

FOR MORE INFORMATION:

Yonatan Bisk

Assistant Professor

ybisk@cs.cmu.edu

George Darakos

Chief Partnerships Officer

412-268-3805 ■ gdarakos@andrew.cmu.edu

talkingtorobots.com

Carnegie Mellon University
School of Computer Science

5000 FORBES AVENUE
PITTSBURGH, PA 15213-3890

   SCSatCMU

cs.cmu.edu