

Postdoctoral Fellow Position at Carnegie Mellon University

Deep Reinforcement Learning Techniques for Human Robot Teaming Systems

OPEN POSITION: A postdoctoral fellow position at Robotics Institute, CMU

SUPERVISOR:

Prof. Katia Sycara (katia@cs.cmu.edu)

The Robotics Institute, Carnegie Mellon University

Website: <http://ri.cmu.edu/ri-faculty/katia-sycara>

LOCATION:

The Advanced Agent-Robotics Technology Lab

The Robotics Institute, Carnegie Mellon University

Pittsburgh, Pennsylvania, USA

DESCRIPTION:

The successful candidate will work on Deep Reinforcement Learning algorithms for human agent teams, with agents interacting autonomously or with humans. Position open immediately in 2022. Start in early 2023 is negotiable. The expected duration of the position is one to three years with renewals upon review. In particular, the research will involve computational models for making inferences and predictions about the behaviors and activities of other agents and human-agent teams so as to (1) perform complementary beneficial actions, and (2) give advice to human and agent team mates to improve overall team performance. The research involves a rich variety of research issues, such as theory of mind models, explainable AI, concept learning and transfer learning.

QUALIFICATIONS:

- PhD in a field related to AI/ML in particular reinforcement learning in Robotics, CS or related discipline.
- A strong theoretical background in Machine Learning

- Programming skills including experiences using C++, Python, and/or MATLAB, Neural Network frameworks, eg pytorch
 - Ability to present work clearly both written and orally
 - Experiences with deep learning tools mandatory.

APPLICATION DETAILS:

Applicants should provide the following material via email to Prof. Katia Sycara (katia@cs.cmu.edu). Please use the subject line: "Postdoc application". Applications will be reviewed as they are received.

- A curriculum vitae
- A statement of research expertise and interests (up to 2 pages)
- Up to 3 publications
- Names and contact information of three references
- Dates of availability
- A personal website, if available, where further details can be found

DUTIES AND RESPONSIBILITIES

The postdoc will (a) carry out high quality research and publish the research results, (b) assist in research supervision and guidance of graduate and undergraduate students, (c) present research results to sponsors, (d) participate in research proposal preparation.