



Open Call for Post-Doctoral Researchers: Field Robotics and Multimodal Large Language Model Application

Tough Cyberphysical AI Research Center (TCPAI) Tohoku University, Sendai, Japan

The TCPAI at Tohoku University is seeking talented postdoctoral researchers to join our cutting-edge project on intelligent robot task execution in extreme environments using multimodal large language models. This research is part of the "Research into Spatial Agents Web to Solve Problems in Extreme Environments" project, led by Prof. Satoshi Tadokoro, and funded by F-REI (2024-2030).

Application Deadline: September 30, 2024

Note: This call will close once the planned number of positions is filled, even if it is before the deadline.

Position Details:

- **Type:** Full-time
- **Work Period:** One year, starting from January 2025 or earlier (with possibility to extend the contract)
- **Salary:** Approximately 6,000,000 JPY per year (including social insurance and taxes)
- **Work locations**
 - Tohoku University, Sendai, Japan, and
 - TCPAI Fukushima Coast Laboratory, Minamisoma, Japan (near the Fukushima Robot Test Field)

Note: Successful candidates will work with team members of the RoboCup RRL Quix.

Required Qualifications:

- PhD in robotics, computer science, electrical engineering, mechanical engineering, or a related field (awarded within the last ten years)
- Strong publication record in relevant areas

- Strong interest in multimodal large language models, machine learning, and robot intelligence in extreme field environments
- Proficiency in programming (C++, Python, ROS) and simulation (Gazebo/Issac Sim)
- Experience with machine learning frameworks (TensorFlow, PyTorch).
- Good spoken and written English skills (Japanese not required)
- Collaborative mindset for working in person with interdisciplinary international colleagues

Preferred Skills:

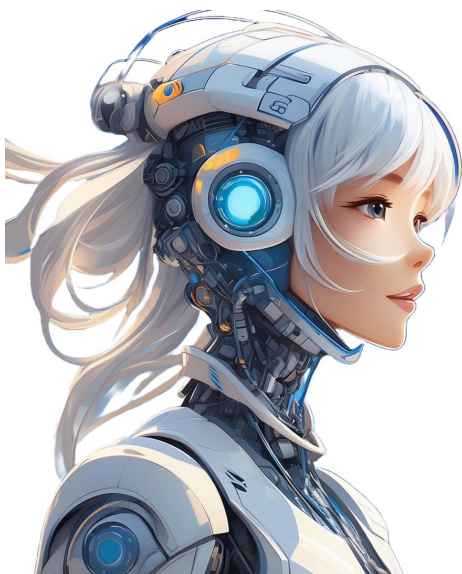
- Practical experience in applying machine learning to real-world problems, particularly in robotics
- Robot hardware design and development

Application Documents:

1. **CV in English** (including a list of research achievements)
2. **Overview of Developed Robots** (highlighting significant hardware and software contributions)
3. **Certificate of PhD Degree** (or certificate of expectation)
4. **Names of Three References** (TCPAI might contact them to ask about the candidate)

How to Apply:

Submit the above documents via email with the subject line "Post-Doc Application" to Prof. Satoshi Tadokoro at tadokoro@tohoku.ac.jp by September 30, 2024. After the initial document screening, remote interview schedules will be set up.



Reach for the Stars