#### Call for Positions:

# Specially appointed Assistant Professor or Specially appointed Associate Professor Transformative AI & Robotics International Research Center, School of Engineering, Tohoku University

Transformative AI & Robotics International Research Center, School of Engineering, Tohoku University invites applications for Specially appointed Assistant Professor or Associate Professor to conduct an international joint research project with Tohoku University and The University of Hong Kong on "Automation of Garment Handling by Robotic Technology".

The objective of this research is to realize a smart robotic system that does not require preprogramming or customization and is widely applicable to the automation of garment handling. We are looking for a person who has experience, research achievements and interest in the following research topics, and who is willing to work energetically on them:

- · Sensing and modelling of three-dimensional environments.
- Development of general-purpose robot hands and mechanisms for grasping flexible objects and motion planning strategies for robots.
- · Flexible object handling using a dual robot arm system and visual servoing.
- Development of simulation systems, including but not limited to flexible materials and system integration for industrial applications.

If you are selected, you will be part of the Transformative AI & Robotics International Research Center and will also work together with a research team from Smart Robotics Design Lab, Department of Robotics and/or Intelligent Control Systems Lab, Department of System Information Sciences in Tohoku University. You will be assigned a specific topic from the aforementioned areas.

## References:

Smart Robots Design Laboratory (Hirata, Weng, Salazar Laboratory/Tamura Laboratory) https://srd.mech.tohoku.ac.jp/

Intelligent Control Systems (Hashimoto/Yamaguchi Laboratory/Kagami Laboratory) http://www.ic.is.tohoku.ac.jp/

# Job Requirements/Qualifications:

Number of positions:1~2

- Applicants must have a doctoral degree or be expected to obtain a doctoral degree by the time of appointment.
- · Applicants should have skills and experience related to the research in aforementioned areas.
- · Applicants must be able to communicate in Japanese or English at a level that does not interfere with work execution.

## Compensation:

Job type: Full-time, Fixed term faculty until the end of March 2023.

Further extension until April 2025 is possible subject to funding and evaluations (Probationary period: 6 months)

Location: Tohoku University, Aobayama Campus (Aoba-yama 6-6-01, Sendai 980-8579, Japan) Starting date: November 1, 2022 (negotiable)

Salary and benefits:

Determined in accordance with Tohoku University's salary regulations (commuting expenses, mutual insurance, mutual aid pension, unemployment insurance, and worker's accident insurance will be provided)

Hours: The Discretionary Labor System, Special Work Type will be applied (Deemed working hours: 8 hours a day)

#### Documents to be submitted:

- \*Please write in English. All documents will be used only for the selection process.
  - A) Curriculum vitae
  - B) List of research achievements (for each of the following items, leave blank if not applicable)
    - 1. Academic papers
    - 2. Reference papers (domestic and international conference presentations, commentary articles, etc.)
    - 3. Publications
    - 4. Patents (registered, published, pending)
    - 5. Status of research funding received
    - 6. Awards
    - 7. Invited lectures, etc.
    - 8. Educational activities
    - 9. Academic societies to which you belong
    - 10. Activities in academic societies
    - 11. Research activities (international joint research, interdisciplinary research, and other noteworthy activities)
    - 12. Social activities (committee member of national or local government, standardization, social implementation of research results, etc.)
    - 13. Other information that may be helpful in demonstrating the applicant's ability to conduct research (optional)
  - C) Reprints of five major papers
  - D) Summary of research activities to date and prospects for this R&D project (about 2 pages on A4 paper)
  - E) Information on one or more persons who can provide references on the applicant (name, affiliation, position, telephone, e-mail address)

The applicants should submit their application by e-mail attaching the above A)  $\sim$  E) document as pdf format to the following address.

Prof. Yasuhisa Hirata,

Department of Robotics, Graduate School of Engineering, Tohoku University

E-mail: application@srd.mech.tohoku.ac.jp

Applications will be reviewed until the position is filled with suitable candidates.

#### **Selection Method:**

Selection will be made through an application screening and an interview. Travel and accommodation expenses for the interview will be borne by the applicant. The interview may be conducted online depending on the circumstances.

#### Note:

Tohoku University promotes gender equality and encourages people of varied talents from all backgrounds to apply for positions at the university. Pursuant to Article 8 of the Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment, Tohoku University shall, as a measure for increasing the presence of women among the academic staff, prioritize the hiring of women deemed qualified for each job opening, based on impartial evaluation. Tohoku University has the largest on-campus childcare system of all Japanese national universities. This network comprises three nurseries: Kawauchi Keyaki Nursery school (capacity: 30) and Aobayama Midori Nursery school (100), both open to all university employees, as well as Hoshinoko Nursery school (120), which is open to employees working on Seiryo Campus. In addition, Tohoku University Hospital runs a childcare room for mildly ill and convalescent children which is available to all university employees. See the following website for information on these and other programs that Tohoku University runs to assist work-life balance, to support researchers, and to advance gender equality.

http://www.tumug.tohoku.ac.jp/en