Deep Interaction Laboratory Group (DIL) of Advanced Telecommunications Research Institute International (ATR) starts new research and development project for "The Realization of an Avatar-Symbiotic Society where Everyone can Perform Active Roles without Constraint (PM: Professor Ishiguro)" towards Moonshot Goal 1 in Moonshot Research and Development Program in Cabinet Office (Realization of a society in which human beings can be free of body, brain, space, and time limitations by 2050). The laboratory is looking for staff members who have a flexible attitude and can contribute to develop and harness the laboratory's research strength. Inquiries regarding this position are welcome.

- Please see the Program Information: https://www.ist.go.jp/moonshot/en/program/goal1/

[Position and number of positions]

A few researchers and engineers (Full-time)

[Affiliation]

- Deep Interaction Laboratory Group, Interaction Science Laboratories
- Deep Interaction Laboratory Group, Interaction Technology Bank
- Deep Interaction Laboratory Group, Hiroshi Ishiguro Laboratories

[Research topics]

In this project, we aim to realize a human-centered avatar symbiotic society by 2050, in which everyone can express themselves by using multiple avatars and play active roles freely. The current research area includes a multi-disciplinary field of studies about human communication and cognition, such as cybernetic avatars (CA), interactive robots and agents, virtual reality, and augmented reality. For this project, we have several sub-projects; people will be in charge of more than one assignment.

- (A) Huggable CA: this sub-project develops huggable CAs' hardware, recognition functions, control mechanisms, and user interfaces for teleoperation. This project also conducts field trials in real environments with developed huggable CAs.
- (B) CA-Platform: this sub-project develops teleoperation systems for operating multiple CAs "done" by one teleoperator, methods for operating one CA by multiple co-teleoperators, and middleware for managing them. Field trials in real environments such as shopping malls will also be conducted in the project.
- (C) Biofeedback interface for CA: this sub-project develops UI technologies for effective CA operation based on biological and behavioral information, investigating the CA usage impact on our body and mind. This project also includes field trials in real environments with the developed interface and CAs.

(D) Bases of CA field trials: in this sub-project we build the bases of field trials for CA in Tokyo and Osaka. The base manages CA, supports building the CA systems, and coordinates the fields for the trials. We require a manager, engineers for developing the base system, and coordinators for collaborating with companies.

[Work Location]

ATR, 2-2-2 Hikaridai Seika-cho, Sorakugun, Kyoto 619-0288 Japan (Kansai Science City)

(People who work on theme-D can work at field experiment areas in Tokyo and Osaka, not mainly ATR)

[Qualifications]

Applicants must have:

- (1) A doctoral degree for researchers / a master degree for engineers
- (2) Excellent research achievements in the related field(s)
- (3) Business level or above in Japanese or English language proficiency

(People who work on theme-D will need business level or above in Japanese language proficiency)

[Starting Date]

Subjects to the first selection: April, 2021 (or as soon as possible thereafter)

Subjects to the second selection: May, 2021 (or as soon as possible thereafter)

Subjects to the third selection: June, 2021 (or as soon as possible thereafter)

[Term of Employment]

From the starting date to March 31st, 2022 (Following the completion of the term, the contract may be extended subject to evaluation)

[Employment Form]

Regular working hours: 1 working day shall comprise 7.5 working hours including a 60-minute break. Flextime system and core time are available.

Salary and Benefits: Salary will be based on individual performance. Employees shall be entitled to annual paid leave and special leave. Commuting allowance, medical insurance and employment insurance will be available.

Regular Holidays: Sundays, Saturdays, holidays defined in the public holiday law, the period commencing on 29th December and ending 3rd January (except for holidays defined in each of the foregoing items), and other holidays stipulated by ATR

[Application Documents]

Applications must be written in English or Japanese and include the following:

- 1. Curriculum Vitae (Free format)
- 2. List of research achievements
- 3. Reprints of major original papers (PDF is recommended)
- 4. An outline of research achievements (within two A4 pages, free format)
- 5. A research plan (within one A4 page, free format)
- 6. Application theme (A~D, multiple themes are welcome)
- 7. Name, affiliation, and contact information (e-mail address) of two professional referees who are willing to be contacted about the applicant

[Sending Address and Contact Information]

e-mail to ms-atr-contact [at] atr.jp

Note: Write [Application for Researcher/Engineer in DIL, ATR] in the subject line. Attach the application documents in PDF format. If needed, protect the documents by password and send it.

If you have questions about this application, please send e-mail to ms-atr-contact [at] atr.jp. Write [Question about Application for Researcher/Engineer in DIL, ATR] in the subject line.

[Application Deadline]

Subjects to the first selection: 25th, January, 2021

Subjects to the second selection: 22th, February, 2021

Subjects to the third selection: 22th, March, 2021

(Until the positions are filled. The selection process will be in the order of arrival)

[Selection Process]

Document screening will be followed by online interviews. Selected applicants will be notified within two weeks after the application deadline. Unsuccessful applicants in the document screening process will not be contacted.

[Use of personal data]

All personal data received will be properly managed and only be used for the purpose of recruitment.