

2022-04906 - PhD Position F/M Socially-Aware Embodied Conversational Agents: Achieving Task and Social Goals in Human-Computer Conversation with students

Type de contrat : CDD

Niveau de diplôme exigé : Bac + 5 ou équivalent

Autre diplôme apprécié : Masters degree in relevant subject

Fonction : Doctorant

Niveau d'expérience souhaité : De 3 à 5 ans

Contexte et atouts du poste

The objective of this project is to build embodied conversational agents (also known as ECAs, or virtual humans, or chatbots, or multimodal dialogue systems) that have the ability to engage their users in both social and task talk, where the social talk serves to improve task performance. In order to achieve this objective, we model human-human conversation, and integrate the models into ECAs, and then evaluate their performance. This position is a 3-4 year doctoral contract.

Mission confiée

The PhD student chosen for this project should have a broad range of skills including at least several of the following:

1. Experience with analysis of human-human conversational behavior, as the team relies on human behavior as the basis for the implementation of conversational agents. A plus would be experience in gathering and constructing corpora as the team routinely gathers and annotates data on the interaction between social and task aspects of human-human conversation.
2. Experience building statistical and computational models of human data, particularly conversational data, based both on our own analyses and on relevant prior literature, using tools such as structural equation modeling, as well as neural network-based approaches..
3. Experience with implementing and managing functioning embodied conversational agents, social robots or spoken dialogue systems.

For further information about the proposed research subject:

For more information on the project, potential candidates should look at the SARA (Socially-Aware Robot Assistant) website and RAPT (Rapport-Aligned Peer Tutor) projects at <http://articulab.hcii.cs.cmu.edu/projects/> and read some of the publications associated with the project, here <http://articulab.hcii.cs.cmu.edu/publications/>

Responsibilities:

The person recruited is responsible for conducting cutting-edge research in the field of embodied conversational agents, including helping to managing interns.

Principales activités

Main activities:

- Build models of human behavior
- Design and carry out experiments
- Analyze their results
- Write articles & present work in conferences
- Improve the existing pipeline of the conversational agent

Additional activities:

- Help to manage research team
- Prepare demos for conferences and visitors

In order to apply for this PhD student position, please upload into JobIn the following:

1. An up-to-date CV
A letter of motivation describing your experience and interests
The names and contact information of 3 people who can write recommendations for you (please note that letters of recommendation will not be accepted - only names of recommenders that we will contact).

Compétences

Technical competence: Advanced data collection, analysis and statistics. Competence in machine learning or demonstrated desire to acquire this competence.

Langue: French, English

Relational competence: ability to work in a team, and collaborate with others from different disciplines and backgrounds. Ability to work independently. Ability to manage other team members.

Additional recommended competencies: background in one or several of the following: cognitive science, linguistics, conversational analysis, sociolinguistics, social cognition, learning science

Informations générales

- **Thème/Domaine:** Langue, parole et audio
Production, traitement et analyse des données (BAP D)
- **Ville:** Paris
- **Centre Inria:** Centre Inria de Paris
- **Date de prise de fonction souhaitée:** 2023-09-01
- **Durée de contrat:** 3 ans
- **Date limite pour postuler:** 2023-03-31

Contacts

- **Equipe Inria:** COML
- **Directeur de thèse:**
Cassell Justine / justine.cassell@inria.fr

A propos d'Inria

Inria est l'institut national de recherche dédié aux sciences et technologies du numérique. Il emploie 2600 personnes. Ses 200 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3500 scientifiques pour relever les défis du numérique, souvent à l'interface d'autres disciplines. L'institut fait appel à de nombreux talents dans plus d'une quarantaine de métiers différents. 900 personnels d'appui à la recherche et à l'innovation contribuent à faire émerger et grandir des projets scientifiques ou entrepreneuriaux qui impactent le monde. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 180 start-up. L'institut s'efforce ainsi de répondre aux enjeux de la transformation numérique de la science, de la société et de l'économie.

L'essentiel pour réussir

Passion for and demonstrated competence in interdisciplinary research, at the nexus of AI and Social Sciences
Ability to work as part of a team

Consignes pour postuler

In order to apply, please send

- (1) a cover letter (lettre de motivation) describing your relevant experience,
- (2) a CV, and (3) the names,
- (3) contact information of 3 people who can write letters of reference for you.

PLEASE NOTE: WE WILL NOT ACCEPT ANY LETTERS OF RECOMMENDATION SENT TO US BY THE CANDIDATE - YOU MUST ONLY SEND CONTACT INFORMATION FOR YOUR REFEREES.

Sécurité défense :

Ce poste est susceptible d'être affecté dans une zone à régime restrictif (ZRR), telle que définie dans le décret n°2011-1425 relatif à la protection du potentiel scientifique et technique de la nation (PPST). L'autorisation d'accès à une zone est délivrée par le chef d'établissement, après avis ministériel favorable, tel que défini dans l'arrêté du 03 juillet 2012, relatif à la PPST. Un avis ministériel défavorable pour un poste affecté dans une ZRR aurait pour conséquence l'annulation du recrutement.

Politique de recrutement :

Dans le cadre de sa politique diversité, tous les postes Inria sont accessibles aux personnes en situation de handicap.

Attention: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des candidatures

Avantages

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Possibility of teleworking (after 6 months of employment) and flexible organization of working hours
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training

Rémunération

The remuneration will be established according to the profile and the experience of the candidate

adressées par d'autres canaux n'est pas garanti.