

Laboratoire des Sciences Cognitives et Psycholinguistique (LSCP)
UMR 8554 - EHESS - ENS - CNRS
29 rue d'Ulm, 75005 Paris

Job opening: Postdoctoral fellow

Job description

We are looking for a postdoctoral fellow with a strong background in machine learning, linguistics, cognitive science, or a related field, who aims to develop a research program at the intersection of artificial intelligence and human intelligence, specifically within the domain of speech and language and development. The successful candidate should be autonomous and motivated, both excited about their own research program and able to talk to others about their research as well. They will contribute to the scientific life of the team and the lab through their research work. Teaching is not necessary, although there are opportunities if desired. Student (co)-supervision is possible and encouraged, though not mandatory.

Description of the laboratory

The [Laboratory of Cognitive and Psycholinguistic Sciences \(LSCP\)](#) is a joint research unit of the Ecole des Hautes Etudes en Sciences Sociales, the Ecole Normale Supérieure, and the CNRS (National Center for Scientific Research). Our laboratory is located in the heart of the Quartier Latin of Paris, in the [Department of Cognitive Studies \(DEC\)](#) of the Ecole Normale Supérieure. The goal of research at LSCP is to understand the psychological mechanisms underlying the acquisition and functioning of uniquely human cognitive functions, such as language, social cognition, and consciousness.

Team description

The successful candidate will join the [Cognitive Machine Learning \(CoML\) team](#), a vibrant team composed of 10-15 people led by Emmanuel Dupoux. The aim of the team is to **reverse engineer** human learning abilities, i.e., to construct algorithms which perform as well (or better) than humans, when provided with similar data, study their mathematical and algorithmic properties and test their empirical validity as models of humans by comparing their output with behavioral and neuroscientific data. Most of the work is focused on modeling the language learning abilities of human children, which, so far, are orders of magnitudes more efficient than current AI models. To do this, the team collaborates with other LSCP team, in particular the [LAAC team](#) to provide observational large scale data on how infants learn language in the real world.

Requirements

- PhD in machine learning, linguistics, cognitive science, or a related field,
- Experience creating neural networks and using a variety of deep learning techniques
- Autonomy and motivation about own research program
- Experience publishing in relevant journals and/or conferences

- Good interpersonal skills, particularly with respect to junior researchers and technical staff
- Strong English writing skills are required (note: speaking French is not required)
- Experience with linguistics and child language is appreciated but not required
- Interdisciplinary experience is appreciated but not required
- Open science experience is highly valued

Salary:

The salary will be adjusted to the candidate's post-doctoral experience (salary depends on experience and tax status; a rough range is 2,400-3,000 euros/month net, to be confirmed case by case).

Start date:

The position should ideally start before Sept 2024. This position is for 12 months, extendable to 24 months conditional to experience, and includes a relocation package.

Applications and requests for information:

Review of applications will begin on **January 15, 2024**, on a rolling basis. Please send to syntheticlearner@gmail.com

- a complete CV,
- a 1-page cover letter explaining how you fit the requirements mentioned above,
- a 2-page research statement explaining the research directions you hope to explore in the next two years,
- a sample of own writing (e.g., a publication where you wrote the bulk of the text for),
- (a link to) a sample of computer code you produced, and
- contact information of two references

Feel free to contact us for more information!