

Postdoctoral project on experimental investigation of emergence of structure in speech

We are looking for someone who has (or who is about to complete) a PhD degree in psycholinguistics, cognitive science or equivalent. You will work on a postdoctoral project that is part of Bart de Boer's European Research Council ABACUS project. <https://ai.vub.ac.be/research/projects/abacus>

The ABACUS project

ABACUS is a European Research Council funded project that attempts to advance our understanding of the evolution of (potentially language-specific) cognitive adaptations for speech. It focuses on combinatorial speech: the ability to combine a limited number of building blocks into an unlimited number of utterances according to learned rules. An important open question is how much of combinatorial speech is due to general cognitive abilities in combination with cultural evolution and how much is due to language-specific cognitive biases. The project combines individual and iterated learning experiments with computational modeling in order to address this question.

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The project

The project would focus on doing iterated learning and/or individual learning experiments with continuous signals (as opposed to discrete symbolic ones). The ultimate goal of the ABACUS project is to investigate whether we can find experimental evidence for cognitive adaptations to learning and using complex, combinatorial speech, and this project should make a contribution to that. In addition we aim to make methodological contributions to the field of iterated learning/experimental semiotics. The experimental PhD projects that are underway look at the emergence of combinatorial structure in acoustic signals using iterated learning and at learning biases for acoustic signals using individual learning experiments. The postdoctoral project is expected to be related to these projects.

There is considerable freedom in the actual work that can be done; the candidate can for instance propose to look at different modalities, or to use existing databases. In addition, the topic of the candidate's PhD thesis will be taken into account in formulating the precise project. The envisaged starting date would be before June 2014.

Conditions

You apply to a two-year postdoc project with the possibility of a short extension (depending on results and availability of funds). Your salary will be a normal Belgian postdoctoral salary (the exact amount of which depends on age and experience) with all social benefits. There is also a budget for doing research and visiting conferences.

You will work in a recently formed international and interdisciplinary research group. The group is part of the computer science department, but it investigates questions about cognition and language, using a combination of experiment and computer modeling. You will be asked to do a limited amount of teaching and supervision of PhD students, as well as help to popularize the project and its results to a wider audience, but that will take up no more than 20% of your working time.

How to Apply

We need a letter of motivation, a brief (max. one page) proposal of what you would like to do, a CV, a copy of your PhD thesis (or in case you have not completed this, another sample of your writing) and the contact information of two people who can provide references. You can send these in pdf format to bart@arti.vub.ac.be. For inquiries you can send a message to this same address, or phone +32 2 629 3755. The deadline for application is January 15, 2013.

The Vrije Universiteit Brussel

The Vrije Universiteit Brussel has been a leading player in Flemish Higher Education for 40 years. The University has 10.000 students and together with its hospital employs more than 5.500 people.

The following form part of the University's mission:

- the development, the communication and the application of a high level of academic education and scientific research, free from all preconceived ideas;
- the translation of these ideals and knowledge into society in the spirit of social engagement;
- the creation of a society in which everyone is capable of engaging in critical thinking.

Working environment

As an employee of the Vrije Universiteit Brussel you work in a dynamic, diverse and multilingual environment. Both our campuses are set within green oases on the outskirts of the centre of the capital of Flanders, Belgium and Europe. This centre, with all its opportunities, is within reach by public transport in less than half an hour.

Depending on your experience and academic merits you will receive a salary on one of the pay scales laid down by the government. Health insurance and free use of public transport for travel to and from work are standard conditions of employment. If you would rather cycle to work, compensation is also available for that. Both campuses have extensive sporting facilities that are at your disposal and a nursery is within walking distance.

More information about working at the VUB is available at www.vub.ac.be under the heading 'future employees'.