The Center of Excellence „Cognitive Interaction Technology“ (CITEC) at Bielefeld University, Germany, invites applications for:

**One PhD position in Gesture-based Child-Robot Interaction**

CITEC is a central scientific institute of Bielefeld University, established within the Excellence Initiative of the German Research Foundation [2]. CITEC brings together computer scientists, biologists, physicists, sports scientists, linguists and psychologists with the aim to understand the processes and functional constituents of cognitive interaction.

The position is part of a newly funded EU project: „Child-Robot Communication and Collaboration“ (BabyRobot). BabyRobot aims to advance human-robot interaction to support learning and development of socio-affective, communication and collaboration skills in both typically developing and autistic spectrum children users. The goal of the project is to develop robots that can share attention, establish common ground and form shared goals with children in the context of their surroundings. This entails making progress in core robotic technologies like audio-visual behavior tracking, socially expressive robot behavior, multiparty communication and collaboration. The project will start in January 2016 and runs for 3 years.

BabyRobot is an international collaboration between six universities (ICCS Athens, Athena RC, University of Hertfordshire, KTH Stockholm, Bielefeld University, and University of Lille) and two industrial partners (Blue Ocean Robotics, Furhat Robotics). CITEC will hire one PhD student to do research primarily on nonverbal gesture-based interaction in relation to shared attention, interpersonal alignment and grounding. Specifically, the subproject to be carried out by Bielefeld University is on developing and implementing modules for recognition and synthesis of expressive social signals and gestures on social robot platforms.

**Requirements**

We are seeking a highly-motivated candidate with
- a degree (M.Sc. or Ph.D.) in Computer Science/Informatics
- a background in Cognitive Systems/Cognitive Science, Artificial Intelligence, Robotics
- qualification and willingness to perform state-of-the-art research

Experience in social robotics nonverbal communication/gesture-based interaction (recognition, synthesis), animated embodied agents (humanoid robots or virtual characters), and/or machine learning is considered an advantage. Experience in operating robots is appreciated. The successful
PhD candidate is expected to have strong programming skills, excellent English communication and writing skills, and the ability to work in an international, multidisciplinary setting.

For more information, please contact Prof. Dr.-Ing. Stefan Kopp (skopp@techfak.uni-bielefeld.de, phone: +49 521 106 12144).

What we offer
The position is a full time research position. It is ranked on the German "TVL-13" payscale with a salary of 3,300 - 4,800 Euro per month, depending on relevant work experience, age, parental status etc. [3]. The contract will be for 3 years. The selected candidate is expected to have written a PhD thesis by the end of the contract. She or he will work closely together with and under the supervision of another Postdoctoral researcher in the same project.

CITEC provides an excellent research environment, modern facilities, and a culture of interdisciplinary cooperation and communication. It is a large-scale research center for intelligent systems and cognitive interaction between humans and technical systems. It greatly contributes to the status of Bielefeld University as one of the premier locations for studying intelligent interactive systems in general. The position is located in the Social Cognitive Systems Group (head: Prof. Dr.-Ing. Stefan Kopp), which is part of the Faculty of Technology at Bielefeld University as well as of CITEC.

Bielefeld is one of the 20 largest cities in Germany (population >320,000) and a lively place with a lot of cultural and entertainment opportunities [4,5]. It is located in the center of Germany, surrounded by beautiful forests offering many possibilities for recreational outdoor activities [6]. Bielefeld is connected to Germany's high-speed rail system, and its central location within Germany means that many of Germany's metropolitan areas (Berlin, Dusseldorf / Cologne, Frankfurt, Hamburg) can be reached easily.

Applications
Applications should include:
- A cover letter expressing the motivation of the applicant, stating research interests and highlighting expertise in the areas mentioned above,
- Curriculum Vitae,
- copy of the university marks (grade list),
- names and contact details of two references.

Applications should be sent by email to Dagmar Philipp (dphilipp@techfak.uni-bielefeld.de), preferably as a *single* PDF document including all materials. Applications should be sent before the application deadline of **October 30th, 2015**. Interviews are expected to be held in mid November. Starting date is 1 January 2016 (or later until the position is filled).

We welcome applications from severely handicapped people. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement, women will be given preference, unless particular circumstances pertaining to a male applicant predominate.