# **PhD** Position at the

### Institute for Information Processing and Microprocessor Technology (FIM Institute)

## at the Johannes Kepler University of Linz

In the area of:

#### **Adaptive Collaboration Support**

In the framework of the **FWF-funded project**:

#### "Adaptive Support for Collaborative e-Learning" (ASCOLLA)

The Institute for Information Processing and Microprocessor Technology (FIM Institute) has a long tradition in e-Learning research, with recent work focusing on the employment of adaptivity as a means towards personalized, learner-tailored distance and blended learning.

A novel research project entitled "Adaptive Support for Collaborative e-Learning" (ASCOLLA), funded by the Austrian Science Fund (Fonds zur Förderung der wissenschaftlichen Forschung – FWF) has started at the FIM Institute. The goal of the project is to provide the technological means through which a lack (or limited amounts) of face-to-face contact between learners in e-Learning can be partially compensated for, towards the goal of supporting, enhancing and facilitating on-line collaborative learning.

To achieve this, the project will investigate the following topics: guiding adaptive collaboration support through (explicitly represented) group-oriented didactic approaches and group social contexts; fostering spontaneous, ad-hoc interactions between on-line learners, and providing opportunities for short-lived, structured collaboration in synchronous online courses; and facilitating the creation, maintenance and exchange of personal learning histories within group settings.

To test and validate its results, the project will develop supporting software components, which will be integrated into the Sakai e-Learning platform. Using this platform two case studies will be carried out within the context of courses taught by members of the institute.

**PhD position** - In the framework of the above project, a PhD position is currently announced with the aim of undertaking research in Adaptive Collaboration Support.

The position will focus on extending adaptive system support to collaborative on-line learning activities. In terms of research work, this will entail for instance: the modelling

of group learning activities; the provision of adaptive support towards the establishment and maintenance of on-line collaborations ranging all the way from structured, long-lived ones, to brief ad-hoc ones; the provision of adaptive awareness cues of a learner's collaborators' activities; etc.

The task is to perform research (30 hours a week) and studies with the aim of completing a PhD degree at the Johannes Kepler University of Linz. Reimbursement will be  $\notin$  1720 per month (Brutto). A qualified applicant may also be offered opportunities to contribute to the teaching at the university as a teaching assistant; such activities would be reimbursed separately.

The position is available immediately, with possible extension beyond the project's end date if necessary. If there is sufficient interest from applicants, the position may be split between individuals.

Applicants must have completed a B.Sc. in Computer Science or related field (a Dipl.-Ing. / M.Sc. and prior involvement in research work will be considered a plus), possess a strong background in Java programming, and a good command of English. Demonstrable experience in the following areas will also be a plus:

- Web- and web service- programming
- Working in large software projects with several contributors
- Experience with e-Learning software and / or related standards and specifications
- Exposure (through research work or university courses) to the concepts of:
  - Interactive Adaptive Systems
  - Computer-Supported Collaborative Work
  - o Human-Computer Interaction

**Applications should include** a motivated letter of application, accompanied by a CV and a transcript of the applicant's undergraduate studies. Applications should be sent by post, email or fax in English to:

o. Univ. Prof. Dr. Jörg R. Mühlbacher Institute for Information Processing and Microprocessor Technology Johannes Kepler Universität Altenbergerstraße 69 A-4040 Linz Austria

Fax: +43 732 24688599

Email: muehlbacher [AT] fim.uni-linz.ac.at