

INTERACT IS:

- Carrying out international research projects that cross international boundaries
- Facilitating and promoting cooperation between students and faculty of the two leading research Universities in Germany (University of Karlsruhe) and the US (Carnegie Mellon University).
- Training, educating and exposing students, industry staff and researchers to work, organize, communicate and manage projects that involve international research teams.
- We are implementing the institute with two physical locations, one at University of Karlsruhe and one at Carnegie Mellon University.

PURPOSE

The international institute will be formed to promote research and educational projects between University of Karlsruhe (UKA), Karlsruhe, Germany and Carnegie Mellon University (CMU), Pittsburgh, USA.

The two institutions are well respected in either country as the leading educational institutions in their respective countries. It is targeted to serve the needs of students and faculty at the two Universities and potentially the needs of industrial partners and sponsors in the US and at the state of Baden-Wuerttemberg, Germany, to connect with appropriate R&D partners in the other country.

RESEARCH

The institute is engaging in several activities that implement and realize its general mission:

Joint Research projects are organized with a cross-institutional and cross-national emphasis to achieve both strong research collaboration and results, but also to ensure cross-cultural fertilization and internationalization of the faculty, students, and staff.

An initial specific research focus was identified as "Pervasive Computing" an emerging field of research in Computer Science that encompasses a number of sub-areas, including Ubiquitous computing, networking, software engineering, intelligent interfaces, multimodal interfaces, acoustic and visual signal and pattern processing, language processing, architecture, design, human-computer interaction, algorithms, and many more.

While this area was identified as an area of initial joint interest to begin joint work immediately, it should not be viewed as limiting the cooperation in any way.

For more information regarding our current research efforts, please visit www.is.cs.cmu.edu.

Joint distributed research teams - One primary concern is to organize the research teams in a cross-national fashion so as to allow for maximum exchange and for cross-fertilization. This exchange is implemented by:

- **Research Stay** - Moving Researchers for temporary (3 months to 1 year) periods to the other site.
- **Short-term academies** - Students and researchers get together for briefings, academies and research retreats to discuss and plan joint projects. Following these academies, the researchers disband and return to their home organization, to continue and complete the planned joined project. This model is particularly useful for student course projects, where students get to know each other and then collaborate using modern communication tools.
- **Distant and Distributed Collaboration** - Students, faculty and staff work together using modern collaboration and communication tools to work in distributed, partially remote teams. Discussions, lectures, seminars, and team collaboration must be carried out involving various communication and collaboration tools, so that distance and language barriers can be overcome effectively.
- **Faculty at both Universities seeks** partners at the other institution and agrees on a joint research project and activity. They also agree on project goals, approach and -if applicable- grading procedures for students.

Educational Exchange Programs - In addition to organizing research projects involving international and distributed teams at both institutions, the institute is also organizing and aligning educational programs at both sites to offer students access to broader course offerings and broader learning opportunities.

The institute has an administrative office that serves as contact point for students wishing to study or do research in the other country or organization. Specifically, it is providing students with information about the exchange; providing assistance in arranging and executing a study or research term at the other site.

The institute is also working to implement joint seminars and courses that are offered to students on both sides.

The institute is working on aligning program requirements and to identify course offerings that can be used to satisfy course requirements at the other institution. It is also working toward finding mutual acceptance of these courses at the other institution.

Industrial Liaison - The institute may also act as a mediator and contact point for industry in either country to make contact with relevant partners in the other.

The institute, however, does see it as part of its mission to seek additional funding and industry interactions and to set up and develop a consortium of German and US industry, to facilitate technological exchange in a neutral setting.

ORGANIZATION

To keep administrative organization simple and well aligned with University practice, the institute is following administrative principles and organizational rules of the respective site and host of operation, even though it follows in its mission the goals of the joint virtual international entity.