Summer Universities for Women in Computer Science

Veronika Oechtering, Simone Alder, Friederike Jolk, Dr. Renate Klempien-Hinrichs, Bettina Söhle, Maria Oelinger

University of Bremen
Dept. of Informatics
P.O. Box 330440
D-28334 Bremen
Germany
oechtering@uni-bremen.de,
simone@tzi.de, rikej@tzi.de, rena@tzi.de,
soehle@tzi.de, oelinger@collide.info

Anna Stiftinger

neue medien & kommunikation Paracelsusstrasse 4/2 A-5020 Salzburg Austria anna.stiftinger@eunet.at

Alexandra Kreuzeder

ICT&S Center University of Salzburg Siegmund-Haffner-Gasse 18 A-5020 Salzburg Austria alexandra.kreuzeder@sbg.ac.at

Dr. Annika Hinze

Dept. of Computer Science University of Waikato Private Bag 3105 Hamilton New Zealand hinze@cs.waikato.ac.nz

Abstract

A cross-university approach will be discussed that reflects monoeducation, networking, and gender oriented organizational reforms in university programs. The concept was developed in Germany in 1997 as a national approach. Each year "Informatica Feminale" (www.informatica-feminale.de) attracts more than 70 female lecturers from universities, research, or industry to give courses on all topics of computer science oriented to the existing university curricula. Participants are female students as well as women interested in further education. The approach has won an European award for best practice. Since 2003 Austria provides a similar project called the "ditact women's IT summer studies" (www.ditact.ac.at). Another project will be located in New Zealand in 2005 as the "Computing Women Conference" (www.cwc.org.nz).

Introduction

In this workshop a cross-university approach will be discussed that aims at activating women computer science students to reform their universities from different edges. The workshop will consist of the presentation of the concept, the evaluations during the last seven years, the transfer of the concept, and the criteria to implement it in other places. Speakers are the project managers of all three co-operating summer university projects from Germany, Austria and New Zealand as well as lecturers and students

with long-term experience in several summer universities. The presentation is planned in an interactive way, with written material handed out as well as with active elements for participants to ask questions and to discuss criteria for success in different international education systems.

Informatica Feminale

In Germany in the early nineties a national approach called the Informatica Feminale has been developed to activate gender-based curricular reforms as well as reforms in educational settings, and to promote women scientists in academic careers (www.informatica-feminale.de). The main fields of action are summer universities for women in computer science. Since 1997 every year more than 70 female lecturers from universities, research, or industry are invited to the University of Bremen. For two weeks in September they teach courses on computing topics with strong orientation to existing university curricula. Participants are female students, who can earn credits, as well as women interested in further education on university level. Around 200-250 participants per year take part in Bremen.

Since 2001 additionally as a more regional satellite of Informatica Feminale, a one-week summer university also takes place at the Applied University of Furtwangen and the University of Freiburg, both in the South West of Germany (www.netzwerk-fit.de/informatica). Here another 40 lecturers and around 150 students participate every year.

The Informatica Feminale is well supported by many institutions, e.g. the German professional computer society Gesellschaft für Informatik, supports it in various ways. The most important results are the high interest of students into this concept and their great engagement from year to year. Networking and community building are the most important effects. It might also be an influence of Informatica Feminale that the number of female students in computer science is increasing all over Germany during the last seven years. The average quota of women in the first year of Informatics was less than ten percent in the middle of the nineties. It reached 17% in 2003. Compared to many other European Countries it is important to note that it increased all the years. At the University of Bremen the quota even reached 23%.

Ditact women's IT summer studies

Ditact_women's IT summer studies (www.ditact.ac.at) is a two-weeks IT summer university, that is opened to female students and scientists. The underlying concept is that of women teaching women and it has been established in Austria in close collaboration with the Informatica Feminale, Germany. Ditact 2004, which is located at the ICT&S Center, University of Salzburg, is already held a second time in Salzburg, Austria. The main goals of the project are: the increase of female students rates in computer sciences und IT-related higher education, the decrease of female drop-outs in IT-related higher education, the raise of female instructors and researchers, networking and cooperating, and the participation of women in information and communication society on equal terms. To achieve these goals, the ditact participants can choose from over 60 courses in different IT fields. They are taught by female experts, who also act as rolemodels. Last year, 128 participants attended ditact, for 2004 more than 200 attendees are expected.

The presentation analyzes the situation of women working and studying in IT fields in Austria and summarizes the intentions and achievements of ditact 2004.

The European Strategy of Gender Mainstreaming

The summer universites for women in computing are embedded in the national and European political strategies of increasing the participation of women in science and technology. These strategies and initiatives are closely connected to oneanother with the aim of equal opportunities for women in the ICT field.

In this workshop the European Union strategy of Gender Mainstreaming will be outlined in its influence on the research and funding programs on the European and the national levels. The concrete effects for the summer universities will be discussed. Gender Mainstreaming means that in all political and administrational strategies,

measures, and activities in planning, implementation and evaluation the impact on women and men has to be outlined, to reach a gender equality. As a top-down strategy Gender Mainstreaming is oriented to institutions and is supported by special measures. Some national initiatives and institutions will be presented which took over gender perspectives in the context of the gender gaps in research and education as well as in the content of education. Examples will be the German Center for Excellence in Information Society and Technology and the Austrian Initiative to Reform the Universities of Applied Sciences.

Computing Women Congress (CWC)

The Computing Women Congress (CWC) is the first Pan-Pacific congress for women in IT; we welcome participants from around the world, but primarily focus on those from the Pan-Pacific region (www.cwc.org.nz). The congress takes place from 5th to 13th February 2005 at the Computer Science Department at the University of Waikato, New Zealand. CWC will run as an annual series of conferences that combine an informal environment with technical excellence. It is inspired by summer universities such as Europe's well-established Informatica Feminale that share CWC's goals and culture.

The Computing Women Congress is a conference that aims to increase the skills, self-image, participation and representation of women in computer science and information technology. The congress aims to provide role models for those early in their computing careers and also a meeting place for those well into their careers. CWC provides an open, explorative learning and teaching environment. Experimentation with new styles of learning is encouraged, with an emphasis on hands-on experience and engaging participatory techniques.

Finally, by providing an arena in which women can share ideas and build supportive networks, CWC helps to build up the confidence and recognition of women in the whole arena of computer science and IT. We aim at building a long-term community of women in IT for New Zealand.

Links

www.informatica-feminale.de www.ditact.ac.at www.cwc.org.nz