

NSF CPATH i18n Grant Working Group Topics

Working groups will form the basis for our small group activities for the next two workshops in May and October. Each group will consist of from 3-8 people and have a designated organizer. These groups will explore the range of issues relevant to each topic including resources, examples, models, and possible pilot projects. We will start these groups at the May workshop. They will present their work at the October workshop in Beijing.

To give your preferences for which groups you would like to participate in, please fill out the survey form at:

http://www.surveymonkey.com/s.aspx?sm=nt8EuRamLZzA4kEVMBHh3g_3d_3d

If you have any questions, contact Sarah Douglas at douglas@cs.uoregon.edu

Experience-based Learning Working Groups (Note: Experience here means residency in or travel to another country):

1. **Industry internships:** Develop program for international internships including stand-alone summer internship and internships coordinated with study abroad programs.
2. **Student exchange:** Investigate a range of student exchange opportunities. Develop programs for student exchanges among CS partner institutions.
3. **Faculty exchange:** Investigate a range of faculty research and teaching exchanges from existing programs. Develop programs for faculty exchanges and collaborative teaching among CS partner institutions.
4. **Summer school and summer workshops:** Develop model programs for students to attend full term summer school courses or short summer workshops abroad in computer science areas reflecting the expertise of the hosting university. See <www.cs.uoregon.edu/activities/summerschool/summer08/> as an example.
5. **International service opportunities:** Develop program for faculty-student international service including volunteering abroad, developing software tools, teaching materials or online services for other countries. Could be part of SE courses. See <fp.sce.tsinghua.edu.cn/wangfoundation/home.htm> and <dsh.cs.washington.edu>

Curriculum Development Working Groups:

1. **Revise IEEE/ACM and ABET curriculum:** Add curricular standards for i18n competence in areas such as global SE, HCI, ethics, project management and communication. Recommend foreign language, global history and business as general education. Recommend international experience.
2. **Model i18n curriculum & degree:** Develop a complete CS degree program that includes i18n curricular and international experiences. Analyze for time-to-completion and resources.
3. **Distributed i18n Software Engineering projects:** Design SE projects that mimic a global (distributed) SE development environment with students from

multiple international CS departments working on a joint project. This could also include an industry-mentored project.

4. **Distributed i18n Software Engineering competition:** Develop possible competition using a model similar to the contest associated with the ACM/IEEE International Conference on SE (SCORE <http://score.elet.polimi.it/>) but with teams of global members.
5. **Cross-cultural communication course:** Develop course in cross-cultural communication both co-located and distributed. Probably can model some topics from similar business courses. Include topics on tools for cross-cultural collaboration.
6. **Global Software Engineering module:** Define curriculum module in the area of global SE (i18n) to be used in standard intro to SE course. Define upper-division course in global SE.
7. **Cross-cultural Human-Computer Interaction (HCI) module:** Define curriculum module in the area of cross-cultural HCI to be used in Intro to HCI course. Define upper-division course in cross-cultural HCI.
8. **International Computer Ethics module:** Define curriculum module in the area of global computer ethics to be used in standard CS ethics course. Topics should include multi-cultural sensitivity, intellectual property, privacy, censorship, business ethics, etc.

Institutional Working Groups:

1. **Department-department partnerships:** Develop a Pacific Rim Consortium to serve as administrative infrastructure for a variety of faculty and student exchanges, and collaborations in both research and teaching.
2. **Dual degree program:** Develop models for dual degree programs where students can receive one degree while attending two universities. Investigate existing programs such as Simon Fraser University and Zhejiang University (China) dual degree program in computer science, MIT-China dual degree programs, and innovative European programs. (See the joint European Master's degree programs www.tu-harburg.de/eciu-gs.)
3. **Outreach for i18n benefits:** Develop industry-academic outreach programs including visiting lecturers, media presentations, and online materials. Publish articles in CS education conferences and journals.
4. **Association of i18n educators:** Develop a volunteer group that will provide professional connections for CS faculty interested in international CS education. Should be connected with a professional association such as ACM or IEEE, or International Association of International Educators (NFSA) www.nafsa.org.