

Computer Science Department Standards for Tenured Faculty Review

[Approved vote of the Computer Science faculty, 2/1/2012]

Approved by CLAS June 29, 2012

Throughout their careers, tenured Computer Science faculty are expected to contribute to departmental excellence through teaching, scholarship, and service. The unit norm effort distribution is 40% teaching, 40% scholarship, and 20% service. In some cases, different individualized expectations may be formalized through an agreement under Provost's Post-tenure Effort Allocation Policy.

Teaching

Faculty are expected to be effective teachers and to strive for excellence in educating the University's undergraduate and graduate students.

Under the standard distribution of effort in the paragraph above, faculty are expected to teach three courses per academic year, appropriately distributed across graduate/undergraduate levels and generalist/specialist topics within the discipline. Computer science is a fast-changing discipline and faculty members are expected to update and revise courses appropriately and to participate in development of new courses and curricula. Faculty can also contribute to teaching through leadership and participation in "reading groups" and informal seminar series aimed at preparing graduate and undergraduate students for research in sub disciplines. Classroom teaching is evaluated through periodic peer assessments, review of course materials, and through formal student evaluations.

Additional teaching-related activities include undergraduate and graduate student advising, guiding students on Honors and independent study projects, TA training and supervision, developing new courses, writing textbooks, development of course related materials and laboratories, and applying for teaching- and curriculum-related grants. Faculty are expected to provide advising and mentoring of an appropriate share of the Department's undergraduate population and serve on an appropriate share of graduate qualifying exam panels.

Scholarship

Faculty members are expected to maintain active scholarship throughout their careers that demonstrates continued development and growth and to achieve national and international recognition and visibility in their specialties. In computer science, this is typically reflected in three related components: scholarly publication, externally funded research, and Ph.D. student production.

Faculty members are expected to develop their publication portfolio throughout their careers. This includes regular publication of research results in refereed journals and conferences. Carefully reviewed, competitive conferences represent a primary forum for timely dissemination of computer science research results. Journal articles are often the best forum for presenting more detailed, complete, and/or deeper results. Faculty are expected to publish two to four research articles per year, and assessment of scholarly productivity will include evaluation of the quality and impact of the dissemination forums.

Funded research projects are one of the primary means of gaining visibility and having impact in computer science. Faculty are expected to seek and obtain external funds to support their scholarship and PhD students.

A third important component of one's scholarly profile is PhD student mentoring. PhD students are one of the highest impact components of a research university's research programs. Faculty are generally expected to be the primary research advisor of more than one student at a time, thus regularly producing several PhD graduates. The rate of PhD production is expected to be several per decade.

Additional indicators of scholarly impact include: creation of significant software artifacts, publication of research monographs or other scholarly books, invitations to speak at national meetings and conferences, invitations to give colloquia, receipt of professional awards, and development of active research laboratories.

Service

Tenured faculty should make service contributions at several levels: departmental, collegiate and university, community, and professional. Within the department tenured faculty are expected to serve on departmental committees on a continuous basis, and, where appropriate, hold leadership roles in departmental initiatives. Important departmental initiatives include, but are not limited to, graduate student and faculty recruiting, curriculum development, colloquium series organization, industrial relations, and fostering career and internship opportunities for our graduates.

Faculty members are expected to contribute to the institution through service on collegiate and university-level committees, working groups, and initiatives. Faculty should also respond to opportunities to serve the Iowa community through informal education and outreach to, e.g., local and regional schools and industry.

Faculty are expected to contribute to vitality of the broad computer science community, especially the national and international scholarly community. Avenues for such contributions include journal editing, paper and proposal review, program committee memberships, conference and workshop organization, and participation as an officer or committee member in scholarly and professional organizations.