Tenure and Promotion Guidelines
Department of Computer Science, American University

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The Department of Computer Science has rigorous standards for tenure, promotion to Associate professor and promotion to Professor. The department follows the "General Criteria in Evaluation of Faculty Members" as given in the University's Faculty Manual. Specific criteria for the evaluation of Computer Science tenure and promotion actions are given below.

Scholarship

A broad, scholarly knowledge of one's field, creative work and significant scholarship are essential to the mission of the university and to effective teaching. The Department is committed to support and assist in the development of scholarly research. Though standard publication is one indicator of academic achievement, other forms of publication, specifically conference publication, and the dissemination of artifacts such as software, games, computer-based artwork, or computer chips, also transmit ideas.

In the category of scholarship, the file for action in cases of tenure, promotion to Associate Professor and/or promotion to Professor is expected to provide evidence that the faculty member is a recognized expert in their field. It is further expected that the candidate will provide evidence of a well-established scientific research program and clear trajectory for future work.

In the case of promotion to Professor, the file for action should demonstrate that the candidate has sustained a record of scholarly achievement since the previous evaluation. The candidate should also present evidence that they have attained national recognition in their field. Significant indicants of this might include honors and awards from professional organizations, appointments to editorial boards or task forces, selection for organizing committees of prestigious conferences, positions in the governance of scholarly and professional organizations, or invitations to speak at prestigious conferences.

Reviews for tenure and/or promotion will place an emphasis on work completed while the candidate was a member of the American University faculty. The date of submission of the file for action to the Science Rank and Tenure Committee is the last relevant date for reporting publication of scholarship, other than updates regarding publication acceptances of materials already referenced in the file (as provided on page 2 of the CFA's "Instructions for Submitting Files for Action").

Primary criteria

- Refereed journal articles: Journal articles are more the norm for theoretical versus experimental computer scientists. We will attend to both their number and their quality. Assessment of quality can be based on many indicants, but with the recognition that all of them will require contextual information for their interpretation. Some indicants assess the quality and impact of individual articles, like citations, expert testimony, reviews, and press coverage. Some indicants assess the journal of publication rather than the article in question; common ones for this purpose include journals' acceptance rates, their impact factors, and their prestige ratings (when those exist). When there are multiple authors, the role of the faculty member under review should be clarified in the file for action.
- Refereed conference proceedings: The special article, "Best Practices Memo: Evaluating Computer Scientists and Engineers For Promotion and Tenure" (*Computing Research News*, 1999), states that conference presentations are preferred to journal articles for experimental computer scientists, and are also acceptable as a record of progress toward a journal article for theoretical computer scientists. Conference proceedings have the advantage of shorter publication times, the ability to show one's product or work in a public venue of peers, and a potentially more rigorous level of review. Conference proceedings can be evaluated much like journal articles. Citation rates, when available, will also be used to evaluate the quality and impact of conference proceedings.
- Artifacts: These can be items such as chips, circuits, networks, software, robots, computers, games, computer-based artwork, etc. These artifacts both embody the scholarly concept as well as measure it. Artifacts are often shared among researchers, and collegial evaluation is often the best means of assessing the artifact. Artifacts should not just be new; they should be shown to be better than what previously existed. Acceptance in juried exhibitions, festivals and associated press coverage are means by which the impact of artifacts can be assessed.
- Externally funded grants, contracts and awards: In many subdisciplines of Computer Science, external funding is important for advancing research agendas, and in all subdisciplines external funding typically provides evidence of critical peer review. Therefore, it is necessary that all candidates in tenure and promotion actions provide evidence of applications to appropriate external funding opportunities. Generally, at the time of evaluation for tenure and/or promotion, candidates should demonstrate that their history of funding is sufficient to maintain or grow their research programs. Prestige of the funding source, strenuousness of the peer review, oversubscription rate of the funding opportunity, size of the award, and impact on the productivity and quality of faculty scholarship will be considered in the evaluation of external funding. The faculty member should explain their contribution if there are multiple PIs. Scores and reviews for all external funding opportunities, whether successful or not, may be submitted at the applicant's discretion. When included in the file, scores and reviews of unsuccessful proposals may be used for the assessment of the quality of the candidate's research.

Secondary criteria

- Books and chapters in books: Assessment of the quality of these publications can be based on many indicants, with the recognition that all of them will require contextual information for their interpretation. Citation counts (available in Scopus, Google Scholar and ISI Web of Science), when available, can provide evidence of impact in the field. We also recognize that being

published by respected presses (e.g., Cambridge University Press, Oxford University Press) or prestigious series are indicants of quality. Reviews may also be valuable in assessing the quality of a book or chapter. We recognize that either authorship or editorship can be a valuable contribution to a book. Editorship and authorship of books that advance a field are viewed more favorably than textbooks or trade books that primarily summarize accomplishments in a field for a broader audience.

- Selection as a consultant or expert by external organizations for research-related projects. The quality of the outside organization and the scope of the task will be evaluated.

Tertiary criteria

- Important indications of the respect afforded the faculty member by the field: These might include: appointments to grant review panels; selection as a reviewer of journal manuscripts or artifacts, or as a reviewer of candidates for tenure/promotion at other universities; invitations to speak at other universities; requests to serve on PhD committees at other institutions. All candidates for tenure, promotion to Associate Professor and/or promotion to Professor are expected to show some evidence in this criterion.
- Non-refereed journal articles
- Non-refereed conference presentations including published abstracts of these presentations
- Internal grants and awards
- Technical reports
- Formal and informal connections to local research institutions and funding agencies
- Works in progress (e.g., manuscripts under review)

Teaching

The quality of teaching is a primary consideration in the retention and promotion of faculty members. Effective teaching includes organization, development, articulate presentation of the subject matter, the ability to motivate and involve students in the learning process, an appropriate respect for the intellectual needs of students, and providing timely, fair and objective assessment of student performance. Given the dynamic and fast changing nature of computer science as a discipline, the faculty member's teaching must incorporate up to date developments in the field.

Providing a stimulating atmosphere within which students can learn and grow intellectually is also a major professional contribution the faculty member should make to the development of students. This includes frequent and active presence on campus, student counseling and advising, and participation in activities that promote interaction between student life and the academic environment.

Candidates for tenure and/or promotion to Associate Professor must demonstrate that they have achieved excellence in teaching. Candidates for promotion to Professor must demonstrate a sustained record of excellence in teaching.

If the department deems insufficient the evidence from the criteria below, the Rank and Tenure Committee may recommend classroom visitations by faculty to obtain more information on the candidate's teaching performance.

Primary criteria

- Student Evaluations of Teaching (SET): The following ratings receive special attention from higher levels in the review process, and so particular attention should be paid by the faculty member under review and the Rank and Tenure Committee:
    - SET ratings of the degree to which the instructor required high levels of performance (question 5)
    - SET overall ratings of instructor (question 6)
    - SET ratings of students' satisfaction with what they have learned in the course (question 15)
    - SET overall ratings of course (question 16)

  The candidate's scores on these questions will be compared with the averages of both the Department and the College in order to assess teaching effectiveness. The SET narratives may also be valuable in evaluating the candidate's teaching.

- Research supervision: This involves supervision of theses, honors capstones, independent study projects, and other student research activities. We consider both the quantity and quality of research supervision. Among the factors we consider are:
    - Number and level of research supervisees
    - Student feedback on the quality of the professor's supervision
    - Number and quality of publications and conference presentations with students
    - Funding for student research acquired

Secondary criteria

- Teaching awards
- New course development
- Program development
- Use of information technology in teaching
- Other factors such as consulting for other faculty, presenting at teaching conference, publishing teaching techniques
- Selection as a consultant or expert by external organizations for teaching-related projects.

Tertiary criteria

- The conduct of seminars, colloquia, or other forms of planned faculty-student interaction

Service

Candidates for tenure or promotion must show evidence of service to the Department, the College and the University. Since this is the least important of the three evaluation categories, pre-tenured faculty should have the lowest service loads in the department, and in fact will likely not meet any of the primary criteria. The service requirements for promotion to the rank of Professor will exceed those needed to achieve tenure, and evidence of a wider range of primary criteria will be expected at the time of evaluation.

Primary criteria

- Chair of department committees
- Director of program or chair of department
- Leadership on College or University committees
- Mentoring of junior faculty
- Leadership in outside professional organizations and professional societies

Secondary criteria

- Participation on Department committees
- Participation in College and University committees
- Active involvement in Professional societies
- Recruitment and development at departmental, College and University levels
- Service to government and non-profit agencies and organizations on scientific matters

Final Notes:

- These criteria may also be used as the basis for annual merit review scores by the Rank and Tenure Committee and the Chair.