College of Arts and Sciences
DEPARTMENT OF COMPUTER SCIENCE
Rank and Tenure Procedures and Criteria

I. INTRODUCTION

Faculty applying for promotion and/or tenure in the Department of Computer Science are subject to the procedures and criteria described in *The Faculty Manual of Saint Louis University* as well as the Rank and Tenure Procedures and Criteria in the College of Arts and Sciences Policy Binder. This document further interprets those documents and applies their contents to the Department of Computer Science.

II. CRITERIA

II.a. Criteria for Promotion to Associate Professor with Tenure

The criteria for promotion are in the areas of teaching, advising, scholarship and research, professional service, skill and knowledge of the field, and collegiality. Satisfactory performance is required in each area. Of those, teaching and research/scholarship are the most important. Good teaching is absolutely essential, and each university faculty member must be a scholar.

II.a.1 Teaching

Faculty members seeking promotion and tenure must demonstrate success in teaching a variety of courses appropriate to their backgrounds and the needs of the Department. Curriculum development and the supervision of undergraduate research projects, capstone projects, master's theses, and doctoral dissertations in allied fields are considered contributions to teaching.

Teaching proficiency alone is not sufficient to justify tenure and promotion. However, along with scholarship, it constitutes a major criterion for promotion to associate professor. Indicators of teaching quality may include, but are not limited to: responses to quantitative and open-ended questions on student evaluation forms; peer evaluation by colleagues; sample teaching materials that the candidate may wish to submit; the development of pedagogical techniques or materials and publications in conference proceedings or journals devoted to pedagogy; and comments on the student forms submitted with the dossier.

II.a.2 Advising

Advising includes the formal and informal activities of providing academic, professional, and career advice to undergraduate and graduate students. All faculty members are expected to be active in advising. This includes being familiar with university, college, and departmental requirements as well as assisting undergraduate and graduate students in selecting appropriate courses and writing letters of recommendation. Although supervision of undergraduate research projects, capstone projects, master's theses, and doctoral dissertations is considered part of teaching, a faculty member who supervises these activities will often play a significant role as an advisor as well.

Indicators of the quality of advising may include, but are not limited to, the number of advisees, the amount of time devoted to advising, letters from current and former advisees, and the comments made in the student forms.

II.a.3 Scholarship and Research

A candidate for promotion and tenure should have established an ongoing program of high-quality research and a substantial reputation beyond the Ph.D. thesis. There are many ways to demonstrate that such a program and such a reputation have been established.

The most important evidence of research quality is the publication of refereed papers in selective and prestigious conference proceedings, journals, or edited books. Quality of publication is as important as quantity, and publication norms vary greatly within different subfields of computer science (see Section V). With that said, it is unlikely that one could meet this criterion without publishing at least three original papers based upon new research beyond the Ph.D. or postdoctoral fellowship; most successful candidates will exceed this level. Publications that have been accepted but which have not yet appeared should be counted towards tenure and promotion.

Publications that result from collaborative work with researchers in other disciplines count towards tenure and promotion, whether the conference proceedings or journals in which they appear are devoted to computer science or to some other discipline. Collaborative work with researchers in other disciplines is evaluated according to the quality and significance of the computer science component. Instructional materials and pedagogical endeavors, normally considered as teaching contributions, may be considered only to the degree that they have national or international impact on the field, as evidenced by peer-reviewed publications or adoption of materials and/or pedagogies at other institutions.

Secondary indicators of the quality and reputation of a candidate's research program are grants and awards. While the acquisition of external funding to support research programs is not required for advancement, it is expected that most candidates with an ongoing program of high-quality research will have actively pursued research grants or contracts from private foundations, state and/or federal agencies, or industry.

Additional evidence of scholarship and research includes presentations at professional meetings, presentations in seminars or colloquia, nonrefereed papers and books, reviews, patents, published software, and other professional service activities.

II.a.4 Professional Service

Service includes, but is not limited to: service on committees and task forces at the Department, College, or University level; review of research articles and grant proposals within the candidate's field; service on conference program committees; and community service performed in a professional capacity.

II.a.5 Skill and Knowledge

In Computer Science, skill and knowledge of the field are demonstrated primarily through successful teaching and research. Skill and knowledge of the field are also indicated by evidence of professional reputation. Such evidence may include, but is not limited to: invitations to address professional meetings, to review grant proposals, to referee papers, to write reviews of publications, and to serve as a professional consultant; seminar presentations; and comments in the letters from outside evaluators.

II.a.6 Collegiality

The candidate must be able to work constructively and professionally with others in attending to Department, College, and University goals. Collegiality includes sharing of committee assignments, participating in departmental and university functions, and collaboration with colleagues within and outside of the Department when appropriate.

II.b. Criteria for Promotion to Non-Tenure-Track Associate Professor

For continuing non-tenure-track faculty, the criteria for promotion to associate professor are similar to those for tenure-track faculty, as outlined in Section II.a, except for the following key distinctions:

1. **Alignment with Annual Workload Expectations**
   While each of teaching, advising, scholarship/research, professional service, skill/knowledge, and collegiality remains an important factor when considering promotion, the relative weight of these categories must be evaluated in a manner that is consistent with a candidate's annual workload expectations (as defined in the Department's workload policy). It is the Chair's responsibility (see Section III.c) to provide reviewers with a summary of the candidate's individual workload expectations.

2. **Scholarship and Research**
   A successful candidate for promotion to non-tenure-track associate professor must engage in scholarship that brings knowledge to the broader professional community and that garners recognition beyond the scope of the University. While such scholarship may take the form of traditional research, as defined in Section II.a.3, the definition of scholarship in this paragraph need not match the level of productivity that was outlined for promotion with tenure. Furthermore, Section II.a.3 notes that scholarship may include dissemination of instructional materials and pedagogical endeavors, and in the case of promotion without tenure such scholarship may suffice.

II.c. Criteria for Promotion to Professor

For both tenured and continuing non-tenure-track faculty, promotion to the rank of full professor presupposes the qualifications for the rank of associate professor. The candidate must demonstrate further growth in each of teaching and scholarship, effectiveness as an advisor, and continued collegiality. Service, which played a significant but less important role in advancement to the rank of associate professor, may now play a major role, in light of the different career paths taken by some faculty members. While excellence in all areas of activity is expected, a candidate should have made distinguished contributions in at least one such area in support of the mission of the Department, College, and/or University, and those contributions should merit attention among recognized scholars. Further discussion of specific criteria are given in the remainder of this section.

II.c.1 Teaching

The candidate should show continued strong performance and growth in the area of teaching. The candidate is expected to remain up-to-date and be involved in appropriate curricular or pedagogical discussions. Submitted evidence should include the most recent five years of teaching evaluations. Distinguished contributions might include leadership in major curricular initiatives.

II.c.2 Scholarship and Research

The candidate should continue to have a strong and productive research program that earns attention from recognized scholars in computer science, and that makes a substantial contribution beyond the work that was presented at the time of promotion to the rank of associate professor. Evidence in support of this criterion can include, but it not limited to: a sustained publication record of original, peer-reviewed research contributions; citations of these publications by other researchers and scholars; invitations to present papers or keynotes at professional meetings; external funding for research; and professional consulting related to the candidate's research program. Because quality of publication is as important as quantity, and the publication record can be affected by a number of factors (such as a faculty member's decision to shift to a new area of research), there is no specific rate of publication articulated for promotion to the rank of professor.

II.c.3 Professional Service

A full professor is expected to take a more active role in the governance of the Department, College, University, and profession. This may include, but is not limited to: serving as Chairperson of the Department; taking leadership roles in committees that play a major role in the growth of the Department and/or University; leadership roles in assessment or accreditation processes; leadership roles in national or international professional organizations; and organizing symposia, conferences or workshops of international reputation.

II.d. Criteria for Promotion to Emeritus/a Faculty

Except in extraordinary circumstances, a candidate for emeritus/a status will have served the University for at least ten years in a full time capacity. A candidate must have provided valuable contributions to the Department's mission and must plan to remain professionally active. Additionally, the candidate must have been a collegial member of the Department and University.

III. DEPARTMENTAL PROCESS

III.a. Role of the Candidate

The candidate should also be familiar with *The Faculty Manual of Saint Louis University*, particularly those sections pertaining to types of faculty, advancement, and norms for appointment and advancement. If the candidate has any special concerns, the candidate should communicate these to the Chair.

It is the candidate's responsibility to inform the Department Chairperson by April 1st of his or her intention to apply for promotion the following fall, and to provide the Chair with a list of potential outside evaluators, a list of potential student evaluators, and one choice for a colleague evaluator. The list of potential outside evaluators should be free of anyone with a strong conflict of interest (e.g., relatives, thesis or postdoc advisors, current or previous co-workers). The candidate should avoid recommending as evaluators colleagues who have collaborated on a research project within the preceding 48 months. Co-authors without such recent collaborations may serve as evaluators, but only to the extent that they evaluate work as an expert in a field and without reference to any co-authored works, and even then, any previous relationship must be disclosed. The list of potential student evaluators should represent various types of student, as appropriate

to the teaching responsibilities of the candidate (e.g., majors and non-majors, advisees, students from introductory, advanced, or graduate courses, and who earned a variety of grades).

The candidate must submit the completed candidate dossier (cf. the outline in §3 of the College of Arts and Sciences Rank and Tenure Procedures) by September 1st. The candidate's course evaluations and scholarly works should be included as appendices to the dossier.

III.b. Role of the Departmental Faculty

When considering a case of promotion and/or tenure, all faculty with primary appointment in the Department of Computer Science and holding rank/tenure status equal to or beyond that being sought by the candidate will meet, discuss, and vote (by secret ballot) for or against the case of the candidate, with such meeting chaired by the Department Chair. Specifically, faculty members participating in evaluation will include all:

- tenured professors in a case seeking rank as a tenured professor;
- professors in a case seeking rank as a non-tenured professor;
- tenured associate professors and tenured professors in a case seeking rank as a tenured associate professor;
- associate professors and professors in a case seeking rank as a non-tenured associate professor.

Although the Chair convenes said meeting, the voting status of the Chair as a participant is contingent on the Chair's status in the above class of faculty.

In their deliberations, the participating faculty are expected to consider the following:

- Departmental criteria for promotion (Section II of this document)
- The candidate's part of the dossier
- Letters of recommendation from outside evaluators
- Letters of recommendation from students

As stated in the college procedures, "participation in tenure and promotion discussion and vote is a serious obligation from which a faculty member is not lightly excused. If a faculty member is not able to attend the discussion, the Chair should obtain the faculty member's vote in absentia."

III.c. Role of the Chairperson

The Department Chair is responsible for administering the promotion process at the departmental level, in accordance with §4.3 of the College of Arts and Sciences Rank and Tenure Procedures, and assembling the Department's portion of the dossier. This responsibility begins with coordinating the collection of outside evaluations. The Chair begins with the list of potential outside evaluators provided by the candidate, adds names to this list, and then selects at least three outside evaluators; at the Chair's discretion, appropriate Department faculty members may be consulted in selecting the outside evaluators. These evaluators are expected to be recognized scholars in the candidate's field. After consultation with the candidate, the Chair decides what materials should be sent to each evaluator. Generally, this will include a cover letter, a brief vita of the candidate, copies of the candidate's recent publications, and a copy of the Department's tenure and promotion criteria. In the cover letter, the evaluators should be asked to comment on the quality and significance of the candidate's work, and their judgment as to whether the candidate meets the Department's tenure and/or promotion criteria. In the case of non-tenure-track faculty, the cover letter will summarize the candidate's workload expectations for reviewers.

In regard to formal student evaluators, the Chair will compose a list of potential student evaluators, consulting with other Department faculty in creating this list, when appropriate. The Chair then chooses two students, one from the candidate's list and one from the Chair's list. To provide adequate coverage of the candidate's contributions in teaching and advising, additional letters may be solicited after consultation with the candidate. In regard to colleague evaluations, one colleague letter will be requested from the candidate's chosen evaluator and the Chair chooses one additional faculty member as a colleague evaluator. Often, the candidate's faculty mentor (see Section IV) will be one of the colleague evaluators.

When all materials have been received, the Chairperson makes the candidate's dossier (including appendices), the student letters, and letters from outside evaluators available to those faculty who will vote on the candidate. In the case of a non-tenure-track faculty, the chair will provide a summary of the candidate's past workload expectations. The Chairperson calls for and chairs the official Department's meeting to evaluate the application for Promotion and/or Tenure. After the meeting, the candidate communicates the department's recommendation to both the candidate and the College, as described in §4.3 of the College procedures, with the complete dossier submitted to the Office of the Dean by October 1st.

III.d. Procedures When the Chair is the Candidate

When the Department Chair is the candidate, a committee of two tenured faculty members holding the rank of professor will handle the administration of the process. If there are not two suitable faculty members in the Department, the Dean of the College of Arts and Sciences will be asked to constitute an appropriate committee from within the College.

III.e. Procedures for Promotion to Emeritus/Emerita Status

The candidate must submit a current curriculum vitae along with a letter requesting emeritus/emerita status to the Chair of the Department, providing a rationale for emeritus/emerita status being awarded. The Chair presides over a meeting of all tenured faculty members to discuss and vote on the candidate's application.

IV. MENTORING AND EVALUATION OF JUNIOR FACULTY

IV.a. Designation of a Faculty Mentor

When a junior faculty member joins the Department of Computer Science, she or he will work with the Department Chairperson to select a faculty mentor from among the senior members of the Department. The role of the faculty mentor is to ensure that the junior faculty member is successfully developing his or her academic career, and that she or he is aware of the Department, College, and University requirements and procedures for tenure and/or promotion. Typically this involves regular one-on-one meetings with the junior faculty member, occasionally sitting in on his or her classes, encouragement and assistance in seeking out external funding, and providing feedback on the candidate's dossier in advance of the tenure and/or promotion process. The mentor should assist and encourage the junior faculty member to overcome any deficiencies. The mentor should also communicate with the Chair regarding the development of the junior faculty member.

The role of faculty mentor may be reassigned at the request of the junior faculty member, or due to needs arising from significant change to the current mentor's professional responsibilities.

IV.b. Additional Mentorship of Non-Tenured, Tenure-Track Faculty

Each January, the Department Chair asks each non-tenured tenure-track faculty member to submit a draft version of the candidate's part of the dossier for the future tenure and promotion case, and a cover letter that highlights significant changes to that draft during the most recent year. The Chair distributes the dossier to the tenured faculty who then meet, discuss the progress of the non-tenured faculty member, and advise the Chair and faculty mentor on what to communicate verbally and in writing concerning his or her progress towards tenure. A copy of the written evaluation is kept on file and a copy is sent to the Dean. The evaluation in a candidate's third year will be marked as the "Third Year Review" when it is forwarded to the Dean. It is important that this annual report be used as a vehicle for faculty development under the guidance of the faculty mentor. Indeed, the faculty mentor plays a special role throughout the tenure and promotion process, by providing feedback, constructive criticism, and encouragement to the non-tenured faculty member.

V. CHARACTERISTICS OF SCHOLARLY ACTIVITY IN COMPUTER SCIENCE

Due to both its breadth of focus and its historical roots (e.g., mathematics, engineering, physics), computer science, as an academic field, follows an amalgam of professional practices that are relevant when evaluating candidates for tenure and promotion. Therefore, it is important to consider and document the particular norms within subdisciplines relevant to a candidate's work.

In computer science, both singly and jointly authored papers are common. The conventions for order in which authors of a jointly authored paper are listed varies depending on subareas of the discipline. For example, in more theoretical areas the conventions are similar to mathematics, in which authors are listed in alphabetical order and this conveys no information about the relative importance of their contribution to the work. In other subdisciplines, the order of authorship may reflect the relative contributions, from greatest to least.

An important aspect of computer science, relative to many other academic disciplines, is the range of venues for publishing research. While journal publications remain common, especially in more theoretical areas of computer science, in all areas of computer science, publications in selective peer-reviewed conference proceedings are highly regarded. The Computing Research Association has issued a useful statement about "Evaluating Computer Scientists and Engineers For Promotion and Tenure" in the September 1999 issue of Computing Research News, (currently available for download at http://archive2.cra.org/uploads/documents/resources/bpmemos/tenure_review.pdf), which addresses this issue as follows. "The reason conference publication is preferred to journal publication, at least for experimentalists, is the shorter time to print (7 months vs 1–2 years), the opportunity to describe the work before one's peers at a public presentation, and the more complete level of review (4–5 evaluations per paper compared to 2–3 for an archival journal). Publication in the prestige conferences is inferior to the prestige journals only in having significant page limitations and little time to polish the paper. In those dimensions that count most, conferences are superior."

Finally, levels of funding for research in computer science varies as well, in part due to impact but in large part due to the inherent difference in costs for some areas of research. As a general rule, research costs in theoretical areas primarily support personnel and travel, while in more applied areas there may be additionally costs associated with equipment and development of systems.