Scholarship Standards in Electrical and Computer Engineering

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The revised Lafayette College Faculty Handbook requires that each academic department prepare guidelines that

"shall identify the recognized forms of scholarship in the field and shall explain the relative importance of different forms of scholarship for an assessment of a faculty member's scholarship" [1].

This document establishes these guidelines for the Electrical and Computer Engineering (ECE) Department at Lafayette College.

The ECE Department recognizes the following forms of scholarship, listed in approximately decreasing order of importance:

- 1. Peer Reviewed Journal Articles
- 2. Peer Reviewed Conference Proceedings (Full Paper)
- 3. Externally-funded competitive Research Grants
- 4. Research Monographs and Edited Volumes
- 5. Book Chapters and field-specific Encyclopedia Articles
- 6. Patents

2%

- 7. Textbooks
- 8. Conference Proceedings (Abstract Peer Reviewed)
- 9. Conference Presentations and Poster Presentations without Proceedings (Abstract Peer Reviewed)

Normally, the primary measure of scholarship in Electrical and Computer Engineering is the peer reviewed journal article. In some cases primary scholarship can also include papers in the proceedings of selective conferences where full manuscripts are peer-reviewed by multiple reviewers [2, 3] (less selective conference proceedings are weighted at a lower level). Because they lack the same level of peer review, conference papers with proceedings where acceptance is based on the review of an abstract only are weighted at a significantly lower level, as are conference presentations and poster presentations without proceedings.

Evidence of scholarship can also be found in a range of professional development activities, including:

- 1. Invited lectures
- 2. Chairing of panels and technical sessions at conferences
- 3. Editorships of scholarly journals
- 4. Consulting and expert witness testimony when it demonstrates professional development
- 5. Development and distribution of software packages and hardware designs that are widely used for research and pedagogical purposes (e.g., open-source software)

6. Field-specific book reviews and software reviews

It is expected that the primary focus of a faculty member's research will fall within a recognized sub-discipline of ECE. However, interdisciplinary research and engineering education research that complement this primary focus can be a valuable component of a faculty member's scholarly portfolio.

- [1] Lafayette College Faculty Handbook, Chapter 4 Proposed Revisions. December, 2011.
- [2] D. Patterson, L. Snyder, and J. Ullman, "Best Practice Memo: Evaluating Computer Scientists and Engineers For Promotion and Tenure", *Computing Research News*, September 1999.
- [3] "Stature of Reviewed Conference Proceedings", College of Engineering & Applied Sciences, University of Colorado at Boulder, Sept. 21, 2005. Available: http://engineering.colorado.edu/downloads/ConferencePapers.pdf