EXPERIENCES WITH SOFTWARE ENGINEERING ACCREDITATION AND CRITERIA

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Abstract: This panel focuses on recent developments in software engineering accreditation and criteria, how universities are responding to these issues, and how industry views these developments. An earlier panel at FIE’99 addressed the need for and the relevance of software engineering accreditation guidelines. This panel moves to the next stage of discussion and evolution. Additionally, implications of licensure of software engineers will be addressed.

Index Terms-- Accreditation, curricula, licensure, software engineering.

While the computing profession sometimes seems split on the accreditation issue, it is now a reality and many universities likely will institute related degree programs. The experiences of accrediting agencies, vanguard schools, and companies employing graduates provide guidance for other institutions considering undergraduate software engineering degree programs.

Meanwhile, various IEEE-CS and ACM and other professional committees and agencies debate the definition and major facets of software engineering, even while licensure of software engineers is reality in Texas, at least.

So, the profession is now implementing software engineering curricula and licensing software engineers in a time of confusion and—in some cases—strong disagreement between major professional societies.

While the various opinions concerning software engineering's structure and future likely will not converge soon, some leading universities are moving ahead with degree programs designed to produce graduates who will meet industry's needs. These pioneering universities can provide insights to help others.

This panel addresses the issues:
1. Is software engineering an adequately defined discipline?
2. How do ABET criteria relate to curricular design?
3. Do ABET criteria insure adequately prepared graduates from an industry perspective?
4. How are faculty identified, recruited, and retained?
5. Should universities have separate software engineering departments or just degree programs?
6. Should software engineering degree programs be offered through computer science departments or through related engineering departments?
7. Now that software engineering accreditation exists, should licensing follow? If so, what is the role of universities in licensing preparation?

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