INITIAL EXPERIENCES IN ABET ACCREDITATION OF SOFTWARE ENGINEERING PROGRAMS

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Abstract – This panel session reflects on initial accreditation experiences of undergraduate software engineering programs in the USA, from the viewpoint of the programs and evaluators. It is designed primarily for attendees who already have some familiarity with the development and accreditation of undergraduate software engineering programs.

Index Terms – Accreditation, ABET, Software engineering.

INTRODUCTION

A number of educational institutions in the United States, following the lead of others around the world, have started to offer undergraduate software engineering programs [1]-[2]. Accreditation of engineering programs in the USA is performed by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET) [3]. The 2002-2003 accreditation cycle was the first in which undergraduate software engineering programs were evaluated.

While ABET evaluation of the first group of undergraduate programs is a significant milestone, software engineering accreditation is still in its early stages. It may be helpful, then, to reflect on these initial accreditation experiences with the goal of understanding what has taken place so far, assisting those involved in designing and offering software engineering programs, and advancing the software engineering discipline.

PANEL PARTICIPANTS

The participants in the panel session are:

- Mark J. Sebern (session leader), Milwaukee School of Engineering (MSOE)
- Mark A. Ardis, Rose-Hulman Institute of Technology (RHIT)
- Robert Hasker, University of Wisconsin – Platteville (UWP)
- James McDonald, Monmouth University
- Donna Reese, Mississippi State University (MSU)
- James Vallino, Rochester Institute of Technology (RIT)
- Stuart Zweben, Ohio State University

MSOE, MSU, and RIT are among the software engineering programs evaluated in the 2002-2003 accreditation cycle. Monmouth and UWP offer undergraduate software engineering programs and RHIT is preparing to do so.

Dr. McDonald and Dr. Sebern are experienced ABET/EAC computer engineering evaluators. Dr. Zweben is an ABET software engineering program evaluator and past president of the Computing Sciences Accreditation Board (CSAB) and of the Association for Computing Machinery (ACM); he is a member of the Program Evaluator and Program Criteria (PEPC) committee of CSAB.

DISCUSSION TOPICS

The panel will open with brief remarks by panel subgroups representing programs that have undergone ABET evaluation, programs preparing for future visits, and engineering program evaluators. The subsequent discussion will focus on topics of greatest interest to the audience, in areas such as:

- Experiences of programs evaluated during the 2002-2003 accreditation cycle.
- Differences in preparing for the initial software engineering visits, as compared to those for other engineering disciplines.
- Parts of the accreditation criteria that have been of the most interest or concern to programs and evaluators.
- Anticipated changes in evaluation criteria and evaluator training.


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