THE OTHER DIGITAL DIVIDE: WOMEN AND MINORITIES ENTERING INFORMATION TECHNOLOGY PROFESSIONS

William Aspray\(^1\), Joanne McGrath Cohoon\(^2\), Allan Fisher\(^3\) and Maricel Quintana-Baker\(^4\)

Abstract — This interactive panel session will discuss the diversity of the information technology (IT) workforce from several different perspectives: workforce needs, education, and specific underrepresented communities. Audience discussion will follow brief presentations from the panelists.

Index Terms — IT workforce, minorities in computing, women in computing, diversity issues, gender issues

THE IT WORKFORCE: AN OVERVIEW

William Aspray
Executive Director, Computing Research Association

Dr. Aspray will present an overview of education and employment issues that impact the information technology workforce in the United States. He will review recent statistics and policy issues regarding the mismatch of supply and demand of IT workers in the United States, with particular attention to the role of women and minorities.

LATINO STUDENTS IN DOCTORAL AND PRE-DOCTORAL PROGRAMS

Maricel Quintana-Baker
Research Associate/Project Director, American Association for Higher Education

Dr. Quintana-Baker will describe research begun as a study of Latino [U.S. citizens] doctorates in science and engineering (S&E), tracing the baccalaureate origins of those who acquired their S&E doctorates between 1993 and 1997. Her current work studies eleven baccalaureate-granting Hispanic Serving Institutions (HSIs), focusing on recruitment practices, retention strategies, and the role of campus environment. The goal is to develop a research-based manual of best practices (at HSIs) in the production of future Latino doctorates in technical fields.

DEPARTMENTAL INFLUENCES ON UNDERGRADUATE SEED CORN

Joanne McGrath Cohoon
Research Assistant Professor, University of Virginia

Dr. Cohoon will discuss multi-institutional research on the disproportionate loss of women from the undergraduate computer science major. The research shows that while women generally leave the discipline at higher rates than men, this excessive loss is not inevitable. She will also discuss findings on the departmental characteristics and practices that affect the gender gap in attrition from the major.

UNLOCKING THE CLUBHOUSE: WOMEN IN COMPUTING

Allan Fisher
President and CEO, Carnegie Technology Education

Dr. Fisher will present the results of five years of research and intervention by a team in the School of Computer Science at Carnegie Mellon University, where intake of women into the computer science undergraduate major rose from 7% to 42%. Dr. Fisher will summarize the effects of influences ranging from childhood through college, and how they play out in intervention programs.

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