Software Offshoring -
Risks and Opportunities for Software Engineering Programs

Stephen B. Seidman
New Jersey Institute of Technology
stephen.seidman@njit.edu

Larry Finkelstein
Northeastern University
laf@ccs.neu.edu

Abstract

There is increasing anecdotal evidence of a move of software development projects and employment from North America and Western Europe to Asia and Eastern Europe. This panel will address the current and potential impact of such software offshoring on academic programs in software engineering.

Over the course of the last several years, there has been a growing concern in the computing industry over the number of software jobs that have been lost to workers in India, China and more recently to Southeast Asian and Eastern European countries. This has caught the attention of political leaders who are worried about the future of an industry which was once thought to be immune from offshoring and who have raised the specter of legislation to protect jobs. Compounding these concerns has been the rash of media coverage attempting to analyze what the growing trend towards offshoring means in terms of long-term domestic employment in software engineering and more broadly across the computing professions. Although the analysts tend to agree on the fact that software engineering employment outside of North America, along with the computing industry in general, will undergo tremendous growth over the next decade, there is considerable disagreement over future trends for domestic employment.

This panel session will try to assess the scope and scale of software offshoring. It will also discuss the risks and opportunities that this trend will bring to software engineering programs and departments.

Possible risks for academic programs include

- Fewer positions for graduates of BS and MS software engineering programs
- Decreased student interest in undergraduate software engineering programs
- Fewer academic positions for software engineering PhD graduates
- Fewer international applicants for North American graduate programs in software engineering and other computing disciplines

Possible opportunities include

- A renewed focus on the educational objectives of software engineering undergraduate programs and how we can best prepare our students to thrive in an increasingly global economy
- Making sure that software engineering programs provide students with exposure to important application domains