Whatever Happened to Software Engineering?

PROF DANIëL TEICHROEW
Department of Industrial & Operations Engineering
1205 Beal Avenue, Ann Arbor MI 48109-2117, USA
Facsimile: 313 764-3451

Abstract: The term "software engineering" originally appeared as a (some would say, the) solution to the software crisis; the term that has been used to include all the problems, real or perceived, in the use of computers in society. In the last fifty years, computers have been applied to an increasing number and type of activities, in large part, due to the exponential increase in speed, capacity, and exponential decrease in cost. Nevertheless, there are continuing references to the software crisis, an indication that software engineering had not "solved" it. The term computer-aided software engineering (CASE) appeared about ten years ago to signal a major advance. Today, CASE is used much less frequently, particularly by the vendors that market CASE tools or by the individuals that develop software. This paper examines the proposition that software development is engineering, whether it is becoming less, rather than more, relevant to the practical application of computing power, identifies and analyzes some of the forces at work, and discusses some implications for the profession.