

ROLE OF MULTIDISCIPLINARY AND INTERDISCIPLINARY EDUCATION IN COMPUTER SCIENCE: A LITERATURE REVIEW

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Abstract:

Disruption of economies, caused by the Internet and communications technology and its effect to other industries, has had and will continue to have severe effect to the existing business models and production of goods for the upcoming decades. In addition, increasing complexity of global problems calls for the need of new problem solving competences. Complex problem solvers, knowledge workers, are more and more working by collaborative structures, where the solution creation benefits from multiprofessional way of working. This study is focusing on a trend of how higher education, especially in the area of computer science, is responding to the challenge of educating collaborative knowledge workers to a knowledge intensive work environment. The study was performed by a literature review covering publications indexed by the Scopus bibliographic database to find relevant research articles and reviews published between the years 2000 and 2016. The results indicate a steadily growing interest towards multi- and interdisciplinary education. Most of the interest is indicated among the health care, medicine and nursing, and social sciences disciplines, while the interest among engineering and computer science is a clear minority. The results of this article can be used to study further the unused potential of engineering and computer science for the multi- and interdisciplinary education.

Keywords: higher education, interdisciplinary, multidisciplinary, interprofessional, computer science