

The future of the architect's employment

To which extent can architectural design be computerised?

Gabriela Celani, MayconSedrez, Daniel Lenz and Alessandra Macedo

University of Campinas
celani@fec.unicamp.br,
{mayconsedrez, danieulenz, alessandrancelani}@gmail.com

Abstract. This paper was motivated by Frey and Osborne's [1] work about the probability of different occupations being computerised in the near future, titled "The Future of Employment". In their study, the architect's profession had a very low probability of being automated, which does not do justice to the past fifty years of research in the field of architectural design automation. After reviewing some concepts in economics and labor, and identifying three categories of tasks in regards to automation, we propose a new estimate, by looking independently at 30 architectural tasks. We also took into account the reported advances in the automation of these tasks through scientific research. We conclude that there is presently a change in skill requirements for architects, suggesting that we have to rethink architectural education, so architects will not need to compete against the computer in the near future.

Keywords: Computerisation, design automation, architectural profession, architectural education.