World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:17, No:04, 2023

Empirical Study From Final Exams of Graduate Courses in Computer Science to Demystify the Notion of an Average Software Engineer and Offer a Direction to Address Diversity of Professional Backgrounds of a Student Body

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Abstract : The paper is based on data collected from final exams administered during five years of teaching the graduate course in software engineering. The visualization instrument with four distinct personas has been used to improve the effectiveness of each class. The study offers a plethora of clues toward students' behavioral preferences. Diversity among students (professional background, physical proximity) is too significant to assume a single face of a learner. This is particularly true for a body of online graduate students in computer science. Conclusions of the study (each learner is unique, and each class is unique) are extrapolated to demystify the notion of an 'average software engineer.' An immediate direction for an educator is to ensure a course applies to a wide audience of very different individuals. On the other hand, a student should be clear about his/her abilities and preferences - to follow the most effective learning path.

Keywords : K.3.2 computer and information science education, learner profiling, adaptive learning, software engineering
Conference Title : ICESE 2023 : International Conference on Educational Software Engineering
Conference Location : Athens, Greece
Conference Dates : April 03-04, 2023