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Selected form of presentation:
600-second presentation

Title:
Integrating Professional Dispositions into Software Engineering Curricula

Abstract:

The Association for Computing Machinery (ACM) and the IEEE Computer Society (IEEE-CS) collaborated to establish the Computing Curriculum 2023 guidelines, which sets standard for computing education. These guidelines provide a comprehensive framework for academic programs, covering essential technical knowledge and skills, ethical considerations, and professional dispositions crucial for success in the field.

Researchers have recently started exploring the professional dispositions that the industry expects from computing graduates [1]. This presentation will begin by presenting recent research to identify key professional dispositions the industry expects from computing graduates [2], particularly future software engineers [3]. Subsequently, the presentation will highlight how these professional dispositions can be mapped in Software Engineering education and related courses. By the end of this talk, participants will have a clearer understanding of professional dispositions and their potential integration into software engineering curricula.

[1] N. Kiesler and J. Impagliazzo, 2023, "Industry's Expectations of Graduate Dispositions," IEEE Frontiers in Education Conference (FIE '23), College Station, USA, doi: 10.1109/FIE58773.2023.10343406.

[2] D. Tagare, S. Janakiraman, M. Exter, S. Duan, M. Sabin, and J. Tavakoli, 2023, "Dispositions that Computing Professionals Value in the Workplace: Systematic Literature Review and Interviews with Professionals". ACM Conference on International Computing Education Research (ICER '23), Chicago, USA., doi.org/10.1145/3568813.3600118

[3] M. Barr, O. Andrei, A. Morrison, and S. W. Nabi. 2024, "The Development of Students' Professional Competencies on a Work-Based Software Engineering Program". 55th ACM Technical Symposium on Computer Science Education (SIGCSE 2024). ACM, New York, USA, doi.org/10.1145/3626252.3630944