UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Investigating Expert and Novice Programming Problem Solving

Permalink

https://escholarship.org/uc/item/9kx2k801

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 44(44)

Authors

Vorobeva, Maria Muldner, Kasia

Publication Date

2022

Peer reviewed

Investigating Expert and Novice Programming Problem Solving

Maria Vorobeva

Carleton University, Ottawa, Ontario, Canada

Kasia Muldner

Carleton University, Ottawa, Ontario, Canada

Abstract

Programming is a complex problem-solving domain, requiring the coordination of different types of knowledge and skills. The present study investigates expert and novice programming problem solving by analyzing talk-aloud transcripts and the code generated. Based on this analysis a set of basic goal and step components used by novice and expert programmers are identified, which will inform on the generation of cognitive models in the next phase of this research.

In J. Culbertson, A. Perfors, H. Rabagliati & V. Ramenzoni (Eds.), *Proceedings of the 44th Annual Conference of the Cognitive Science Society*. ©2022 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).