



April 14, 2023

Dear Members of the Best Scientific Cybersecurity Paper Committee,

I am writing to nominate Das et al. 2022 for the *Best Scientific Cybersecurity Paper* award.

Sauvik Das, Cori Faklaris, Jason I. Hong and Laura A. Dabbish (2022), "The Security & Privacy Acceptance Framework (SPAF)", *Foundations and Trends® in Privacy and Security*: Vol. 5: No. 1-2, pp 1-143. <http://dx.doi.org/10.1561/33000000026>

I am a computing education researcher. In a recently submitted paper, we used the SPAF in order to understand how AI students think about cybersecurity and whether SPAF predicts these students will implement security and privacy actions.

We have been studying what AI students understand about cybersecurity. Last year, our paper on our study was rejected from the International Computing Education Research conference. One of the complaints was "Where's the science? Where's the theory that you're drawing on?" When I saw the SPAF paper, I realized that we had the theory we were looking for. We completely reconceptualized the paper using SPAF.

SPAF predicts that end-users will utilize experts-recommended security and privacy actions if they have *awareness* of the need for S&P practices and what those practices are, the *motivation* to implement these practices, and the *ability* to implement the practices. We used this same framework to consider whether AI students had awareness, motivation, and ability. We found that they generally had neither awareness nor motivation, which makes it unlikely that they would implement S&P practices.

I recommend the SPAF paper. It's an important contribution grounded in the research literature on behavior change.

Sincerely,

Mark Guzdial
Professor

Brief Biography: Mark Guzdial is a Professor in Computer Science & Engineering and Director of the Program in Computing for the Arts and Sciences at the University of Michigan. He was one of the founders of the International Computing Education Research conference. He was one of the leads on the NSF alliance “*Expanding Computing Education Pathways*” which helped US states improve and broaden their computing education. With his wife and colleague, Barbara Ericson, he received the 2010 ACM Karl V. Karlstrom Outstanding Educator award. He is an ACM Distinguished Educator and a Fellow of the ACM. His most recent book is *Learner-Centered Design of Computing Education: Research on Computing for Everyone* (Morgan & Claypool, 2015). He was the recipient of the 2019 ACM SIGCSE Outstanding Contributions to Education award.