

Design Principles for Defense-in-Depth

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Notions of defense-in-depth in computer security span a range of different meanings and design architectures, many of which are drawn from historical analogies. The inconsistent application of the idea of defense-in-depth and the imperfect analogies that are used to frame it in the context of computer systems have led to a great deal of confusion around what it actually means to implement “defense-in-depth” in practice. In this paper, we review the different design principles that have been suggested and adopted by computer scientists under the umbrella notion of defense-in-depth and explore how their historical origins have shaped their application to computer systems.

Biography

Josephine Wolff is an assistant professor of public policy and a member of the extended faculty of the computing security department at Rochester Institute of Technology. Her research focuses on cybersecurity policy and economics. She received her PhD from MIT in Engineering Systems, and her AB in mathematics from Princeton University.