1100 - Total Recall: Implanting Passwords in Cognitive Memory

Sunday at 11:00 in 101 Track

45 minutes

Tess Schrodinger

What is cognitive memory? How can you "implant" a password into it? Is this truly secure? Curiosity around these questions prompted exploration of the research and concepts surrounding the idea of making the authentication process more secure by implanting passwords into an individual's memory. The result? The idea is that you are not able to reveal your credentials under duress but you are still able to authenticate to a system. We will begin with an understanding of cognitive memory. Implicit versus explicit memory will be defined. The concepts of the subconscious, unconscious, and consciousness will be addressed. The stages of memory pertaining to encoding, storage and retrieval as well as the limitations of human memory along with serial interception sequence learning training will round out our build up to the current research and experimentation being done with the proposal to implant passwords into an individual's cognitive memory.

Tess Schrodinger

Tess is a security engineer and researcher with over twenty years of experience in security and counterintelligence. Her areas of interest are Insider Threat, Quantum Computing, Security Awareness, Cryptography, and Triathlons.

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