PROJECT KMYTH

CIS 497 – Senior Project – Fall 2021

Project Description:

Kmyth is an interface to hardware allowing users to seal/unseal data using a Trusted Platform Module (TPM). The TPM contains Platform Configuration Registers (PCR's) which store hashed values of the machine state. When data is sealed through Kmyth, the hashed values of the PCR's are retained. Sealed data can only be unsealed using the same physical TPM and PCR values that were used to seal it. Our project involves extending the authorization of Kmyth to allow users to unseal data using known future PCR values (e.g., the new PCR values after performing a software/firmware upgrade).

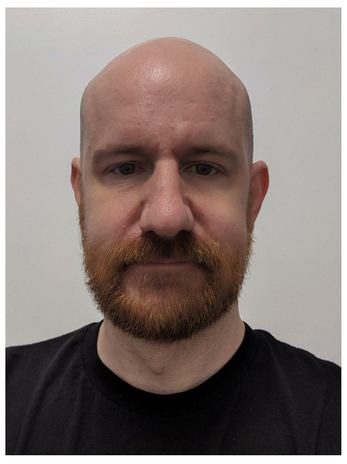
Clients:

Nick Felts, Research Directorate, NSA
Randy Meisel, Computer Systems Researcher, NSA

Our Team:

Jenna Frisch, Computer Science

Born in Mobile, Alabama, Jenna is a continuing student pursuing her Bachelor's of Science in Computer Science at the University of South Alabama. Her hobbies include 3D modeling and rigging, digital photography, and drawing.



Jared Necaise, Computer Science

Born in Gulfport, MS, Jared is pursuing a degree in Computer Science at USA . Jared enjoys strategy gaming, both on computer and table top, live music, and exploring computer systems.

Alan Pysnack, Computer Science

Born in St. Petersburg, Florida, Alan began pursuing his CS degree at USA at the age of 29. Alan has several hobbies, including programming, graphic design, making music, writing, performing stand up, & more.

Trey Williams, Computer Science

Born in Huntsville, AL, Trey is a current student working for his degree in Computer Science at the University of South Alabama. His hobbies include Video games, Animation, renovating all kinds of objects and playing with his dog Hazel.