Grant Jurgensen

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Education _____

Master of Science in Computer Science

June 2019 - May 2022

University of Kansas

GPA: 3.98

- Thesis: A Verified Architecture for Trustworthy Remote Attestation
- Awards: Outstanding Master's Researcher in the School of Engineering

Bachelor of Science in Computer Science

August 2015 - May 2019

University of Kansas

GPA: 3.94

- Minor in Mathematics
- Honors: Distinction, Honor's Program, Dean's Honor Roll

Work Experience _____

Computer Scientist

December 2022 - Present

Kestrel Technology

- Assisted in development, testing, and verification of a partially-verified network stack, as well as porting to the seL4 microkernel.

Computer Scientist

May 2022 - Present

Kestrel Institute

- Expanded Kestrel's "Automated Program Transformation" (APT) library used in formal program synthesis via stepwise refinements.
- Contributed to the "ACL2 to C" (ATC) framework for verified synthesis of idiomatic C programs from formal ACL2 specifications.

Graduate Research Assistant Undergraduate Research Assistant

June 2019 - May 2022

June 2018 - May 2019

University of Kansas

- Lead developer of our "Attestation Manager" (AM) prototype. The AM interprets a domain-specific attestation protocol language to perform specific system measurements and package the cryptographic evidence for the requester. Designed for cross-platform support, targeting Linux, macOS, and seL4. Written in CakeML and C.
- Contributed to the design of a system architecture for secure attestation. Developed a formal model
 of the system architecture start-up procedure in the Coq theorem prover to conduct formal proofs of
 safety and separation.
- Worked on the DARPA Cyber Assured Systems Engineering (CASE) project to integrate our AM into larger systems.

Undergraduate Teaching Fellow

September 2017 - May 2018

University of Kansas

- Wrote practice problems which constituted half of the student's in-person class time.
- Assisted students through practice problems during class.

Publications _

Petz, A., Jurgensen, G., and Alexander, P. Design and Formal Verification of a Copland-based Attestation Protocol. In ACM-IEEE International Conference on Formal Methods and Models for System Design (MEMOCODE'21), Virtual, Nov 20-22, 2021.