

TRISTAN SEIFERT

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<https://tseifert.me/>

EDUCATION **Texas A&M University, College Station, TX** Aug 2016 - May 2021

- BS in Computer Science, minor in Cybersecurity

SKILLS

Software

- Proficient in C/C++, Swift, x86/ARM assembly, Objective-C, Python
- Familiar with OpenGL, Metal
- Experience working on kernel drivers for FreeBSD, macOS and Windows
- Developed several microkernel-based hobby operating systems
- Collaborated with small and large teams using Git

Security

- Some experience reverse-engineering software with Ghidra
- Familiar with the use of cryptography for ensuring integrity and confidentiality
- Excellent background in secure software development
- Extensive experience developing mitigations for existing code

Embedded

- Experience with bare metal ARM and MIPS programming
- Worked with STM32, LPC15xx, 68k, and various ARM/MIPS SBCs
- Familiarity with embedded Linux (Yocto)
- Developed on embedded Oses such as FreeRTOS, L4, and μ CLinux
- Implemented various protocols over I²C, SPI, CAN, and Ethernet

Hardware

- Familiar with Autodesk EAGLE, KiCAD for schematic and PCB layout
- Designed and built several complex digital boards
- Worked with Verilog on Xilinx, Intel, Lattice CPLDs and FPGAs
- Experience debugging with logic analyzers and oscilloscopes
- Some experience reverse-engineering existing hardware

Miscellaneous

- Fluent in both English and German
- Dual citizen (Germany, U.S.)

EXPERIENCE **Microsoft** Jul 2021 - Present

Security Engineer II – MORSE Green Team
Contributed security mitigations to actively exploited components (CLFS, Win32k)

Apple Inc. Jan 2020 - Aug 2020

Software Engineering Intern – Core OS
Worked on the Trusted Kernel team, which develops [Secure Enclave](#) firmware
Implemented various security improvements on L4-based microkernel

Groupon Inc. May 2018 - Aug 2018, May 2017 - Aug 2017

Systems Engineering Intern
Developed new internal DNS system based around PowerDNS
Assisted in transitioning various services to the cloud (AWS)
Maintained DNS and Netscaler infrastructure

TAMU Division of Marketing and Communications Sep 2016 - Apr 2021

Front-end Developer
Developed and maintained several high-profile sites for the University

LINKS

- <https://github.com/tristanseifert> – Contains a variety of personal projects
- <https://tseifert.me/> – Personal website