Adam McDaniel

Graduate student and software developer at the University of Tennessee

✉ amcdan23@vols.utk.edu
🌐 adam-mcdaniel.net
📝 blog.adam-mcdaniel.net

EXPERIENCE 🌎

• **University of Tennessee,** Knoxville — *Graduate Research*

MAY 2023 - PRESENT

Performing systems research under Dr. Jantz. Profiling apps by examining physical memory at fixed intervals through program runtime. Identifying programs with compressible memory to improve Linux's ZRAM module.

• **University of Tennessee,** Knoxville — *Graduate and Undergraduate Teaching Assistant*

AUGUST 2021 - PRESENT

Teaching computer science lab classes. Advising students on how to complete assignments and troubleshoot their programs during office hours. Grading student assignment submissions.

• **Oak Ridge National Laboratory,** Oak Ridge — *Software Developer Intern*

MAY 2019 - AUGUST 2019

Developed Rusty-CI, a general purpose GitHub and GitLab continuous integration tool. Contributed to the ASGarD (Adaptive Sparse Grid Discretization) project, a partial differential equation solver for exascale architectures.

• **University of Tennessee,** Knoxville — *Software Vendor*

SEPTEMBER 2018 - JUNE 2019

Helped develop the Simulated Electronic Fetal Monitoring app in JavaScript, and rewrote the application in Dart to run natively on mobile and desktop.

NOTABLE CREATIONS 🚀

• **Sage** — Custom Operating System + Compiled Language With Online Web-Playground

github.com/adam-mcdaniel/sage

Created a programming language and built a community for it. Used the programming language to create a user-space for my operating system, SageOS. Created a web playground for people to demo and experiment with the language on their phones and other devices.

• **Dune** — Portable Working Environment For Developers

github.com/adam-mcdaniel/dune

Implemented a portable shell with rich features. Built a community around the language with ~2000 installs. Dune runs on all major operating systems and on Android. Result: I use this tool daily to navigate Linux and Windows, and to write build scripts for my software.

SKILLS AND ACHIEVEMENTS 🏆

Proficient in Rust, Python, C, C++, Bash, PowerShell, Git version control.
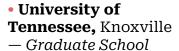
Daily Linux user.

Shell scripting experience.

Professionally experienced with both GitHub and GitLab.

Created multiple 700+ star repositories on GitHub.

Proficient in Spanish, spoken since 2021.

High school Valedictorian with 4.857 GPA.

EDUCATION 🎓

• **University of Tennessee,** Knoxville — *Graduate School*

JANUARY 2023 - PRESENT

Maintaining a 3.88 graduate GPA. Set to graduate with a Masters degree in May 2023.

• **University of Tennessee,** Knoxville — *Bachelor of Computer Science*

AUGUST 2020 - DECEMBER 2022

Graduated in December of 2022 with a 3.95 GPA (*Summa Cum Laude*) at 20 years old.

• **Pellissippi State Community College,** Knoxville — *Computer Science Major*

JANUARY 2019 - MAY 2020

Took 1.5 years of dual enrollment towards my Bachelor's degree during high school.