

# Adam McDaniel

Graduate student and software developer at the University of Tennessee

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adam-mcdaniel.net

## EXPERIENCE

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

AUGUST 2021 - PRESENT

Teaching computer science lab classes. Advising students on how to complete assignments and troubleshoot their programs during lab and 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.

## PERSONAL CREATIONS

### Dune — Portable, custom shell

[github.com/adam-mcdaniel/dune](https://github.com/adam-mcdaniel/dune)

Implemented a shell with features such including: syntax-highlighting, tables, lists, standard library functions, lambdas, and macros. Dune runs on all major operating systems. Created a weather API in the shell script.

### Oak — Compiled programming language

[github.com/adam-mcdaniel/oakc](https://github.com/adam-mcdaniel/oakc)

Wrote a compiler from scratch for a C like language with structures, copy constructors, destructors, conditional compilation, and type checking. Created the virtual machine's custom instruction set.

### Chess-Engine — Zero dependency chess engine for the web, the desktop, and embedded devices

[github.com/adam-mcdaniel/chess-engine](https://github.com/adam-mcdaniel/chess-engine)

Created a chess engine, which runs in the browser, without using the standard library. Also implemented a desktop GUI interface. The engine supports multiple chess variants, and can handle custom board states.

## 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 600+ star repositories on GitHub.

Proficient in Spanish.

High school Valedictorian with 4.857 GPA.

## EDUCATION

### 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*).

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

JANUARY 2019 - MAY 2020

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