

Colby Cox

Conway, AR 72034
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OBJECTIVE

To acquire a software engineer/data scientist position where I can further develop and utilize the skills I have learned.

EDUCATION

University of Central Arkansas (August 2024 - Present)

Master of Science – Applied Mathematics

University of Central Arkansas (August 2020-May 2024)

Bachelor of Science (GPA 3.4) - Computer Science

EXPERIENCE

Graduate Teaching Assistant — University of Central Arkansas

SPRING 2025 - PRESENT

Assist with College Algebra and Applied Calculus. Teach classes as needed. Tutor in the Math Resource Lab. Grade papers for Transitions to Advanced Mathematics. Proctored the ACTM math contest. Attend weekly meetings.

PROJECTS

Teaching Applied Calculus — Balloon Project

SPRING 2025

Taught an applied calculus class about related rates and web development using Three.js to model a balloon increasing and decreasing in size, showing how the radius and volume change with respect to time.

Networking — Home Server

SUMMER 2024

Built a server with Ubuntu, managed storage with Samba, managed media with Plex, and used Pi-hole for adblocking.

Regression Analysis — Agriculture and Undernourishment

SPRING 2024

Analyzed the relationship between a country's agriculture and undernourishment and showed how agriculture statistics are correlated.

Multivariate Analysis — Voting Demographics

FALL 2023

Used K-Means clustering and Multidimensional Scaling to prove that age, income, sex, and ethnicity impacted voting tendencies.

Probability Theory — Monty Hall Problem

FALL 2023

Generically proved the Monty Hall Problem both mathematically and by running it through a simulation.

Database Systems — IMDB Project

FALL 2022

Designed a database based on IMDB over the course of a semester.

HARD SKILLS

C++
Python
Java
R
SQL
GitHub
Microsoft Office
HTML 5
CSS
Javascript
React
Tailwindcss
Maple
Latex
Calculus
Data Clustering
Probability Theory
Linux/Unix Systems
Linear Algebra
Complex Analysis

SOFT SKILLS

Creativity
Leadership
Problem Solving
Detail-Oriented

INTERESTS

Playing music
Dance
Video Games

LINKS

<https://www.linkedin.com/in/williamcolbycox/>
<https://github.com/ColbysPrograms>
<https://colbysprograms.github.io/Portfolio/>

REFERENCES

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