William "Colby" Cox

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

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.

Data Clustering — K-Means Project

FALL 2023

Recreated the K-Means clustering process in C++ with initialization, standardization, and scoring measures.

Database Systems — *IMDB Project*

FALL 2022

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

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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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