Colin Bakker

github.com/colinjbakker colinjbakker.github.io cbakker207@tamu.edu 636-751-0314
1725 Harvey Mitchell Pkwy S, Apt 1830, College Station, TX 77840

Education

Texas A&M University May 2026
Bachelor of Science in Computer Science *Current GPA: 4.0/4.0*
Awards: National Merit Scholarship, President's Endowed Scholarship, George E. Carr '56 Endowed Scholarship, Engineering Honors
Certifications: freeCodeCamp Responsive Web Design: https://www.freecodecamp.org/cbakker207 - January 2024

Skills

Languages: C++, Python, Java, JavaScript, HTML, CSS, LaTeX
Tools: Git/GitHub, Linux, Visual Studio, VS Code, Vim, PowerBI

Experience

Textron Aviation | *Data Analysis Intern* June 2024 – August 2024
- Collaborated with cross-functional teams to optimize the refresh speed of PowerBI Workspaces responsible for delivering reports to the Programs department and the Analytics, Pricing, and Data department by over 90%.
- Prepared and presented weekly report-outs to management to communicate my project's progress.
- Shadowed the E-Commerce department's software development team to gain an understanding of the Agile Scrum process and the software development life-cycle.

Texas A&M University | *Peer Teacher* January 2024 – Present
- Assisted hundreds of students enrolled in freshman and sophomore level Computer Science courses during lab and one-on-one office hours.
- Taught C++ and Python language use, error handling, program analysis and design, memory management, and object-oriented design.
- Assisted students in debugging programs, honing skills in identifying and resolving complex software issues using debugging software.

Texas A&M Cybersecurity Club | *Member* August 2023 – Present
- Learned cybersecurity techniques such as binary exploitation, web exploitation, reverse engineering, and cryptography.
- Earned 8th place out of 50 teams at TAMU Fall CTF 2023 and participated in NSA Codebreaker Challenge.

Projects

Office Space Worker Distribution | *JavaScript, HTML/CSS, VS Code* October 2023
- Collaborated with a team to develop a full-stack web application to analyze worker preference data and design an ideal office layout, minimizing worker conflict and maximizing available floor space
- Provided program documentation for judgment as a part of a hackathon competition
- Planned, programmed, and optimized program under a 24-hour time constraint

Graphical Projects | *Python, C++, Java, OpenGL, JavaFX, GitHub* November 2021 - Present
- Created Wordle, Pong, first person 3d games and other graphical applications using C++, Python and Java programming languages as well as the JavaFX, OpenGL, raylib, and wxWidgets libraries.
- Made use of linear algebra concepts and matrix operations to perform transformations on three dimensional vectors to render scenes on screen.
- Utilized Git/GitHub for version control and documentation.

Password Manager | *C++, Crypto++, GitHub, MinGW* July 2023
- Programmed a C++ program that encrypts and stores passwords locally. Symmetrically encrypts passwords using a key derived from a master password the user memorizes
- Researched and utilized the Crypto++ library for SHA3 and PBKDF2 functions to hash passwords