Cole Plagens

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EDUCATION

University of Houston — Houston, TX
Bachelor of Science in Computer Science, Minor in Mathematics — *Aug. 2023 – Dec. 2025*

- Relevant Coursework: Database Systems, Data Structures and Algorithms, Operating Systems, Data Science I, Statistics for the Sciences, Data Science and Statistical Learning, Fundamentals of Software Engineering
- Dean's List Fall 2023 - Present

Lonestar College — Houston, TX
Associate's in Science in Computer Science — *Aug. 2021 – May 2023*

PROJECTS

Themepark Management System | *React, MySQL, ASP.NET, Azure* — Jan. 2025 – Apr. 2025

- Led a team that developed a full-stack six-flags styled theme park management system web application with CRUD operations.
- Designed and implemented a MySQL database schema with Azure and DataGrip as the database client, including user authentication and data tracking.
- Enforced semantic constraints in the system through the use of triggers in the application. The triggers would keep data consistent for rides being available based on their maintenance status and the rides having special displays on the application side when they have been frequently ridden.
- Fully deployed the application frontend through Vercel and its backend + database through Azure.

Messaging App | *React, Express, PostgreSQL, Prisma, Tailwind* — Jul. 2025 – Present

- Designed a user-friendly, highly responsive frontend to support real-time messaging between users, supporting direct messaging and group chats.
- Utilized an ORM to simplify database operations during development, JWT tokens for user authentication, and unit testing to ensure functional parts of the software work as expected.
- Implemented complete CRUD functionality with a tech stack that is deployed with Vercel and Render.

Volunteer Activity Application | *React, Next.js, Express, PostgreSQL, Docker* — Sep. 2025 – Present

- Led the development of a full-stack volunteer matching application that included user authentication, event management, volunteer matching, a notification system, and volunteer history.

EXPERIENCE

Crew Member — Jul. 2022 – Aug. 2023
Firehouse Subs — *Houston, TX*

- Provided excellent customer service in a fast-paced, team-oriented environment.
- Upheld franchise best practices and protocols for food handling safety and efficiency.
- Held in high regard by guests, coworkers, and managers for performance.

Operating Systems Course Tutor — Sep. 2025 – Present
University of Houston — *Houston, TX*

- Collaborated with students and other tutors in the department to provide valuable help to students needing assistance with their programming assignments and examination preparation.
- Troubleshooted student programs through rigorous C/C++ programming assignments requiring challenging implementations of course content.

TECHNICAL SKILLS

Languages: Python, C/C++, SQL (Postgres, MySQL), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Express, Tailwind, ASP.NET, Next.js
Developer Tools: Git, Docker, Prisma ORM, Supabase VS Code, Visual Studio, PyCharm, DataGrip
Libraries: pandas, NumPy, Matplotlib, Seaborn