Dean Bar-Ner

Austin, Texas | (737) 274-0225 | deanb258@gmail.com | https://github.com/deanb4

Education

Texas State University   Expected Graduation: Dec 2026
Bachelor of Science in Computer Science

Austin Community College   Jan 2023 – Dec 2024
Associates of Computer Science
GPA: 3.85
Phi Theta Kappa Academic Honor Society
Relevant Coursework: Programming Fundamentals, Data Structures and Algorithms, Computer Organization and Machine Language, Engineering Physics

Skills

C++, Python, HTML, CSS, JavaScript, Linux, Django

Projects

Workout Tracker Web Application

- Created a full-stack web application using Django, HTML, CSS and JavaScript. Included features such as user authentication, exercise logging, progress tracking, and data visualization.
- Designed and executed the UI and UX, handling both front-end and back-end development.
- Engineered dynamic data visualizations using Chart.js to create interactive progress charts, based on real-time database information.

A* Search Algorithm Visualization

- Designed and developed a visualization tool for the A* search algorithm using C++ and the SFML library.
- Implemented an interactive GUI to demonstrate how the A* algorithm finds the shortest path in a grid-based environment.
- Used SFML for rendering graphics, enabling users to customize start and goal points as well as creating obstacles.

Password Manager Application

- Developed a secure password manager application in Python using Tkinter, SQLite3 and PyCrypto, incorporating AES encryption and hashing to safeguard user credentials.
- Utilized PBKDF2 with HMAC-SHA256 for password hashing in the main login process, ensuring resistance against brute-force attacks through key stretching and cryptographic salt.
- Implemented AES encryption with PBKDF2 key derivation to secure passwords in a user's password vault.
- Designed a Tkinter-based GUI, enabling users to securely manage their credentials.
- Built a SQLite3 database to manage user data, employing efficient CRUD operations.

Work Experience

Personal Trainer   Feb 2015 - April 2017

- Designed personalized fitness plans and managed all aspects of the business, including scheduling, client communication, financial management, marketing, and administrative tasks.

Flying Cargo Delivery Driver   Jan 2018 - Aug 2022

- Collected packages, arranged them for optimal routing and delivered to clients.

Basketball Coach   May 2019 - Feb 2020

- Coached a team of 3rd-4th graders, developing their skills and fostering teamwork.

Volunteer

Basketball Clinic Assistant Coach, Jewish Community Center   Jan 2024 - Feb 2024

- Assisted in coaching 4th-8th graders, leading drills and teaching fundamentals.