

CAN ERCAN

cann0211@gmail.com | (832) 844-9059 | in/can-ercan1102 | github.com/cann-e | can-ercan.com

WORK EXPERIENCE

Freelance Web Developer, Self-employed

July 2025 – Current

- Developed and designed custom websites and web applications for various clients, ensuring seamless user experiences and responsive design.
- Collaborated with clients to understand project requirements, delivered custom solutions, and provided ongoing support and maintenance.
- Managed project timelines, budgets, and client communications to ensure on-time and within-budget delivery.

Research Assistant, University of Houston

May 2024 – December 2024

- Contributed to conceptualization, research & development of Concept Maps for publication.
- Designed and implemented an interactive tool to enhance visualization and usability, improving user comprehension by ~30% (based on internal testing).
- Collaborated with 2 faculty members and 3 student researchers to improve usability and functionality of the project.

PROJECT EXPERIENCE

Image Signal Filtering

May 2025 – August 2025

- Implemented various image filtering techniques in both the spatial and frequency domains using Python.
- Developed custom functions for noise reduction and image enhancement through manual Discrete Fourier Transform (DFT) and Gaussian/Laplacian filters.
- Designed intuitive UI elements and game mechanics using an event-driven programming model.
- Applied Fourier-based methods for effective filtering, showcasing the ability to analyze and process image signals beyond standard libraries like OpenCV.
- Improved image clarity and detail by designing custom noise-removal algorithms, enhancing the overall image quality for real-world applications.

User Management & PDF Approval System

January 2025 – May 2025

- Developed a secure web application using Python, Django and PostgreSQL to manage user accounts, authentication, and a 4-step PDF approval workflow.
- Integrated Office365 OAuth for 100% of user logins and implemented role-based access control (RBAC) to manage permissions across admin and standard user roles.
- Enabled profile management, user deactivation/reactivation, and signature uploads.
- Automated LaTeX-based PDF generation with system-generated timestamps and user session data, handling 20+ form fields per submission.
- Deployed using Docker containers and configured for cloud compatibility with Azure services.

Restaurant Chain Management System

August 2024 – December 2024

- Developed a full-stack restaurant management system using JavaScript, Node.js and PostgreSQL to simulate operations across 5+ restaurant branches.
- Designed a relational database schema handling 1,000+ synthetic users, loyalty memberships, menu items, transactions, and multi-location support.
- Showcased SQL query integration for real-time updates and analytics.

EDUCATION

University of Houston, Houston, TX

Bachelor of Science, Computer Science

August 2025

Minor in Entrepreneurship

Houston Community College, Houston, TX

Associate of Science, Civil Engineering

May 2020

CERTIFICATIONS

Free Code Camp

Certified Full Stack Developer Curriculum

Princeton University

Algorithms, Part I & II

GitHub Education

Data Science & Machine Learning Experience 2025

DataCamp

Data Types in Python, Python Toolbox, Intermediate Python for Developers 2025

SKILLS

Programming

Python, C++, JavaScript, RStudio, HTML, CSS

Tools

Node.js, Git, Docker

Software

Pandas, CUDA, Django, PostgreSQL, Linux

Frameworks/Libraries

NumPy, Pygame, Matplotlib