

# JONATHAN WARREN

Full-Stack Software Engineer

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## EDUCATION

### **Southern Connecticut State University**

Bachelor of Science in Computer Science, *June 2024*

New Haven, CT

Honors: Dean's List

**Advanced Coursework:** Artificial Intelligence | Distributed and Parallel Programming | Data Mining | Object-Oriented Programming | Data Structures | Algorithm Design and Analysis | Software Design and Implementation | Operating Systems | Theory of Programming Language | Calculus I & II | Applied Statistics | Discrete Mathematics

## SKILLS

Software Development Lifecycle (SDLC) | Agile/SCRUM | Project Management | Full-Stack Development | RDBMS Design | MS Office Suite | Leadership | Communication

## TECHNOLOGY

JavaScript | Python | Java | MySQL | HTML | CSS | Google Cloud Protocol | Google App Engine | Amazon Web Services | Docker | GitHub | Visual Studio Code | Ardoq | TOGAF 9 | Microsoft PowerBI

## PROFESSIONAL EXPERIENCE

### **Regional Water Authority** – New Haven, CT

*Junior Enterprise Architect*, January 2024 – Present

- Responsible for upkeep and maintenance of the organization's Business workflow and IT infrastructure.
- Utilize tools such as Ardoq, Microsoft PowerBI, and Visual Studio Code to support building the RWA's Enterprise Architecture repository by maintaining and improving current models within the repository.
- Collaborate with Business Partners, Infrastructure, and Application Managers in the development of strategic information technology plans to support business strategies.
- Participate and collaborate with technology and business stakeholders to develop an Enterprise Architecture vision that helps solve complex technology problems and ensures that architecture roadmaps continually align with business objectives.

### **Southern Connecticut State University** – New Haven, CT

*Teaching Assistant – Artificial Intelligence (CSC 581)*, February 2024 – Present

- Contribute to the academic success of students by collaborating with Dr. Hossain to provide constructive feedback on assignments and exams.
- Ensure timely and accurate assessment of student work and demonstrate strong organizational skills to manage grading workload effectively.
- Foster a positive and inclusive learning environment by addressing student inquiries and concerns promptly and professionally.

## APPLICATION PORTFOLIO

### **CampAIgn** – AI-Enhanced Advertisement Campaign Generator | [Github](#) | [Live Application](#)

- CampAIgn is an AI-enhanced advertisement campaign generator developed for my senior capstone project, utilizing various APIs such as OpenAI's GPT and Dall-E Models, as well as the Imgur API, Gmail API, Facebook API, and Google App Engine to allow users to create Campaigns using AI, manage them in a cloud-hosted database using Portfolios, and directly export them to their favorite social media app, all through a published, live web-application. The project contains a dynamic and interactive UI utilizing asynchronous JavaScript rendering, alongside HTML, CSS, and Bootstrap. The backend routes, built-in functions, forms, and database models were created using Python.

**Features:** Account creation, secure login method, password encryption, email notifications, generative AI interaction, cloud-hosted database for managing user-generated content, visually appealing GUI, and direct interactivity with social media applications.

**Technology Used:** Django HTML | CSS | Bootstrap | Jinja | Python | Flask | MySQL | Google Cloud Protocol | Google App Engine | JavaScript | Generative AI | OpenAI API | Facebook API

### **Finance Tracker** – Web Application for Visualizing Personal Finances | [Github](#)

- The Personal Finance Tracker (PFT) is a Flask web application designed for visualizing personal finances, completed as a personal passion project and deployed on servers through Amazon Web Services. The project contains dynamic, color-coded

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graphs for full expense breakdowns and account balance tracking. The backend routes, forms, and database implementation, alongside the front-end templates and corresponding style sheet were created singlehandedly, from scratch.

**Features:** Account creation, secure login method, password encryption, email notifications, responsive graphs, visually appealing GUI, and a fully functional database for storing payment methods, transactions, and users.

**Technology Used:** Django HTML/CSS | Jinja | Python | Flask | MySQL | Amazon Web Services

#### **LateMate** – *Software Design and Development Project* | [Github](#)

- LateMate is a Flask web application designed for enrolling and dropping collegiate courses, assigned as a group project during the Spring 2023 semester and deployed on servers using Google Cloud Protocol. The project contains a full Software Requirement Specifications document, including business workflow diagrams, use cases, sequence diagrams, class diagrams, and an entity-relationship diagram. I was primarily responsible for the backend routes and forms, written in Python, and database implementation with MySQL and Python models.

**Features:** Account creation, secure login method, password encryption, email notifications, responsive and fluid GUI, and a fully functional database for storing courses, users, and requests.

**Technology Used:** Django HTML/CSS | Jinja | Python | Flask | MySQL | Google Cloud Protocol

#### **Personal Website** – *Online and Readily Accessible Portfolio Platform* | [jpwarr.com](#)

- Live website containing more information about myself, my programming history, my projects alongside their corresponding GitHub repositories, notable and applicable courses taken throughout my collegiate experience, and reviews from past clients for freelance website creation services.

**Features:** Responsive, visually appealing GUI, functional contact form using flask-mail and a simple Python script, and various interactive menus and panels throughout the page.

**Technology Used:** HTML/CSS | JavaScript | Bootstrap | Amazon Web Services

#### **Heart Attack Prediction Model** – *Artificial Intelligence Project* | [Github](#)

- Fully functional model utilizing Machine Learning algorithms from Sci-Kit Learn, a Python module, such as KNN, ANN, and Decision Trees to predict risk of heart attack, utilizing data on over 300 samples collected and compiled by researchers in 1988.

**Features:** 85-90% accurate Machine Learning model containing visual graphs, histograms, correlation heat maps, and trees using PyPlot and Seaborn modules for data visualization.

**Technology Used:** Python | Sci-Kit Learn

## **SUPPLEMENTAL EXPERIENCE**

### **State of Connecticut** – Watertown, CT

*Assistant Lifeguard Supervisor*, July 2022 – September 2022

*Lifeguard*, Jun. 2022 – Jul. 2022

- Received 80 hours of on-site and virtual training, resulting in receiving both the *Lifeguarding with CPR/AED For Professionals*, *First Aid, Epi and Asthma Training*, *Emergency Oxygen*, *First Aid for Public Safety Personnel*, and *Waterfront Skills* and *Bloodborne Pathogens Training* certificated conducted by CT Department of Energy & Environmental Protection.
- Ensured patron safety and positive public relations through employing proper training precautions and state park safety protocol while maintaining a friendly, yet professional attitude toward coworkers, supervisors, and the public.
- Displayed leadership skills and a strong ability to learn and adapt to the training quickly, resulting in a timely promotion.
- Led group training drills, oversaw mock drowning scenarios for testing purposes, communicated on secure, encrypted radio lines with law enforcement agencies, and managed employee scheduling alongside the primary Lifeguard Supervisor.

### **Capital Quarry Materials** – Naugatuck, CT

*Laborer*, June 2018 – Present

- Created a revised and updated company website from scratch, which will be deployed live upon prior website contract expiring December 2024.
- Operate and perform routine maintenance on heavy machinery in compliance with OSHA rules and regulations.
- Communicate directly with customers via phone and in-person interactions, which results in positive customer reviews and consistently returning customers on a weekly, monthly, and yearly basis.