Todd Dong

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EDUCATION

Carnegie Mellon University

Aug. 2024 - May 2028

Bachelor of Science in Computer Science and concentration in Machine Learning

Pittsburgh, PA

Relevant Courses: Fundamentals of Programming and Computer Science, Principles of Imperative Computation, Mathematical Foundations for Computer Science,

Extracurriculars: CMU Varsity Swim and Dive, Volunteer swim lessons coach, Asian Student Association, ScottyLabs

TECHNICAL SKILLS

Languages: C, Java, JavaScript, Python, HTML, CSS

Technologies: TensorFlow, NumPy, Matplotlib, scikit-learn, Django

Tools: VS Code, Processing, LaTeX, Jupyter, Git, ChatGPT

Certifications: Machine Learning (Stanford University, DeepLearning.AI), AWS Cloud Practitioner

EXPERIENCE

University of Alaska Anchorage Artificial Intelligence Lab

Jun. 2025 - Aug. 2025

Machine Learning Intern

Anchorage, AK

- Led project as the sole software developer for a user friendly text assist application for individuals with hearing-impairment
- Implemented 4 GB Ollama Phi LLM for natural language processing to decipher text, live audio, and audio files
- Architected Django-based user management system with secure authentication, registration, and login functionality
- Brainstormed with Professors to improve user experience, diversify features, and receive user feedback

CMU ScottyLabs | https://cmueats.com/

June 2025 - Present

SWE Developer

Remote / In Person

• Simplified user experience for 1,000 daily users and 3,600 weekly users enhancing appearance and efficiency

PROJECTS

Artificial Neural Network for Number Recognition | Python

Jul. 2025

- Built and trained a 3 layer neural network with TensorFlow on 60,000 MNIST image dataset to classify handwritten digits
- Applied image normalization, grayscale conversion, resizing, inversion, and center of mass alignment to increase classification accuracy on real-world inputs to improve raw input accuracy from 92% to 98%
- Trained model using the Adam optimizer Achieving peak accuracy with 5 epochs in less than 30 seconds

Full Stack AI Assisted Weather App | HTML, CSS, JavaScript

Jun. 2025

- Constructed a responsive app to show real-time weather conditions to **200k**+ cities from data from OpenWeather API
- Integrated GPT-3.5 natural language processing wrapper enabling users to ask conversational weather queries
- Automatically detects and loads weather at users' location and for 6 popular cities to cut down lookup time

AI Personal Workout Assistant | HTML, CSS, JavaScript

Jul. 2025

- Wrapped Open AI's GPT-4 API to generate tailored plans based on 7 prompts supporting 1 million+ unique workouts
- Utilized this self developed app to create and follow personalized gym and cardio routines during swim offseason, resulting in a personal weight loss of over **10** pounds
- Shared app with 8+ friends and family who achieved an average weight loss of 1.8 pounds through personalized plans

Virtual Machine | C

Dec. 2024

- Engineered a functional stack based VM to execute custom bytecode, simulating execution and memory allocation
- Implemented 60+ bytecode instructions including arithmetic, logic, memory allocation, function calls, arrays
- Optimized stack and frame handling using an algorithm that trimmed execution time by 37%