Todd Dong

todddong@andrew.cmu.edu • (440) 228-6103 • www.linkedin.com/in/todd-dong-795732324 • https://todddong.github.io/Portfolio/

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

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*

- Implemented **4 GB Ollama Phi** LLM for natural language processing to help hearing-impaired individuals
- Architected Django-based user management system with secure authentication, registration, and login functionality
- Formed CSRF-protected backend endpoints to handle API requests and ensure secure data transmission

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
- Auto-detects users' location and preloads weather for 6 popular cities to cut down lookup time

AI Wordle Game | Python **Dec. 2024**

- Designed game logic, including user input, computer guessing algorithms, similar visual graphics output, and hints
- Organized code by utilizing object-oriented programming and cohesive structure, tested on **50+** users
- Included 3 computer guessing algorithms ranging in efficiency and complexity, with hardest mode **averaging 3.4 guesses**

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%**