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 **OpenAI Whisper** for high accuracy speech recognition to convert live audio and uploaded mp3 files to text
- Leveraged **4 GB Ollama Phi** LLM for natural language simplification of transcribed and manually inputted text
- Deployed full stack solution combining speech to text, LLMs, and user database system using django framework
- 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 optimized stack based VM to execute custom bytecode and frame handling trimming execution time by **37%**
- Implemented **60+** bytecode instructions including arithmetic, logic statements, memory allocation, function calls, arrays