

Tony Xia

UCLA, Los Angeles, California | 424.465.4996 | summertony717@gmail.com

TonyXia2001.github.io | linkedin.com/in/summertony717

Technical Skills



Python, C++, Java, JS, C, R, Swift
Git, Docker, Linux CLI, Google Cloud

PyTorch, TensorFlow, Sklearn
Pandas, Numpy, Selenium, AMT

Projects



- Coding Question Classifier** | Python, PyTorch, Transformer, Numpy, Selenium, Pandas Jan—July 2021
- Conceptualized the possibility of **predicting coding problem type** using NNs
 - Explored 6 different **deep non-linear classifiers** to improve the result
 - Collected and cleaned 10000+ problems for training
 - Achieved a **30% improvement** on the random baseline
- Car Speed Predictor** | Python, PyTorch, Numpy, OpenCV Jan—Mar 2020
- Replicated the top solution to the Comma AI car speed prediction challenge
 - Explored **semi-supervised learning** as a potential solution
 - Improved model performance by incorporating **optic flow** in the training
- Joe's Kitchen** | Google Vision API, Spoonacular API, React Native May 2021
- Created a recipe app that suggests recipes based on an image of user's fridge
 - Constructed a convenient method for users to find healthy food recipes
- Is This Orion** | Python, TensorFlow, Keras, Numpy May—June 2019
- Utilized Python TensorFlow to create a **ConvNet** for star image classification
 - Explored other possibilities on how **machine learning** could be **applied to astronomy**
 - Augmented the dataset with and doubled the number of data points

Experiences



- Research Assistant** | Center for Vision, Cognition, Learning, and Autonomy Jun 2021—Present
- Collaborating with Ph.D. students to **create in demand machine learning datasets**
 - Collected and cleaned datasets using tools such as Pandas and AMT
 - Designed and implemented original architectures for the **Visual-QA** tasks
- Team Member** | UCLA ICPC Team Dec 2020—March 2021
- Achieved **top 8** out of 100+ teams in the SoCal ICPC regional contest
 - Honed strong **algorithmic thinking** and **problem-solving** skills through training
 - Solved challenging problems under time constraints on a team of 3
- Officer** | ACM ICPC at UCLA Mar 2020—Present
- Diversifying the CS community at UCLA through **organizing weekly workshops**
 - Planned and implemented a coding contest with hundreds of participants

Education



- University of California, Los Angeles** Sept 2019—June 2023
- Computer Science & Applied Mathematics, GPA: 3.91
- Intro to Machine Learning
 - Intro to Computer Vision
 - Statistical Models, Regression
 - Data Analysis and Experiment Design