

YAN PAN

4500 Centre Ave ♦ Pittsburgh, PA 15213
(412)-897-9799 ♦ ypan2@andrew.cmu.edu ♦ panyan7.github.io

EDUCATION

Carnegie Mellon University

B.S. in Computer Science, 2019 – 2023 (expected)
◦ Concentration in Machine Learning, Minor in Mathematical Sciences

Tsinghua University

Host Institution Program, 2021

RESEARCH INTEREST

- Theoretical foundations of deep learning, reinforcement learning, and representation learning.
- Optimization for machine learning, non-convex optimization, and online optimization.
- Applications of multimodal machine learning, computer vision, and natural language processing.

RESEARCH EXPERIENCE

Carnegie Mellon University MultiComp Lab

Undergraduate Research Assistant, 2021
◦ Advisors: Louis-Philippe Morency, Paul Liang.
◦ Researched multimodal machine learning for social interactions. Studied and implemented methods for state-of-the-art language models to condition on visual features. Experimented with multimodal transformers on egocentric datasets with both visual and text modalities.
◦ Funded by *Summer Undergraduate Research Fellowship*.
◦ Documents: SURF Proposal

HONORS & AWARDS

- Summer Undergraduate Research Fellowship (\$3500), Carnegie Mellon University, 2021
- Dean's List, High Honors, CMU School of Computer Science, Fall 2019 – Spring 2021
- Global Finalist, Shing-Tung Yau High School Science Award – Computer Award, 2018
- Finalist, International Mathematical Modeling Challenge International Contest, 2018
- Outstanding, International Mathematical Modeling Challenge Greater China Contest, 2018

TEACHING EXPERIENCE

High School Affiliated to Renmin University of China

Co-Instructor

- Mathematical Modeling and Application, Spring 2019
Topics: Applications of optimization, graph theory, differential equations, clustering, and basic machine learning in mathematical modeling.

SELECTED COURSEWORK

Carnegie Mellon University

([†] PhD level)

- Convex Optimization[†]
- Introduction to Machine Learning[†]
- Quantum Computation
- Algorithm Design and Analysis
- Computational Photography
- Computer Vision
- Computer Graphics

- Great Ideas in Theoretical Computer Science
- Principles of Real Analysis

SKILLS

Programming Languages	Python, C++, C, MATLAB, Standard ML, Haskell, Java
Platforms	PyTorch, TensorFlow, Keras, Scikit-Learn, OpenCV, OpenGL
Software Tools	L ^A T _E X, Git, Vim
Natural Languages	English (Proficient), Mandarin Chinese (Native)

Last updated: July 13, 2021