Andrew Yang

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SUMMARY

Computer Science Sophomore at Arizona State University with experience in medical imaging research, high performance computing, and computer vision. Currently conducting faculty-mentored projects with the goal of publication and seeking Summer 2026 Machine Learning / Artificial Intelligence internships.

EDUCATION

B.S. in Computer Science — Expected May 2028
Arizona State University, Tempe, AZ — 4.00 GPA

TECHNICAL SKILLS

Programming Languages: Python, Java, C++
Machine Learning / AI Frameworks: PyTorch, TensorFlow, YOLO
High-Performance Computing: SLURM, CUDA, Linux
Tools & Workflow: Git, GitHub, Verilog

PROFESSIONAL EXPERIENCE

Barrett Fellows Program | ASU Honors College — Fall 2024 – present

- *Selected into ASU Barrett Fellows Program to pursue faculty-supported research in medical imaging and vision, with ongoing projects targeting peer-reviewed publication.*

ASU Teaching Assistant and Research Assistant | JLiang Lab — Fall 2023 – present

- *Replicated ResNet/U-Net++/Ark on NIH CXR-14 (100k), MIMIC-CXR (370k), RSNA-Pneumonia (30k), VinDr-CXR (18k), and Shenzhen (662), achieving ≤3% in the receiver operating characteristic curve (AUC) Accuracy difference via PyTorch/CUDA on V100/A100 GPUs.*

Research Assistant | ASU SCENE program — Fall 2023 – Spring 2024

- *Improved chest X-ray localization accuracy by 2% across CheXpert and ChestX-ray14 using RoentGen diffusion vs. baseline CNNs.*
- *Ran independent experiments with foundation models for multi-label and multi-class classification, collaborating with PhD students to adapt methods for clinical tasks.*

LEADERSHIP

ASU Teaching Assistant in Topics in Imaging Informatics (Mini-Course) — Summer 2025

- *Guided 15+ undergraduate and graduate students through PyTorch/CUDA experiments, resolving setup issues and ensuring reproducible results.*
- *Built reproducible baselines for imaging tasks, later reused by cohorts for model benchmarking.*

RELEVANT PROJECTS

Playlist Manager (C++ Control Flow Project) — Summer 2025

- *Engineered a C++ linked-list playlist system supporting add, remove, reorder, filter, and sum operations for managing audio tracks.*

Computer Vision and Computational Biology | MedMNISTv2, Ark-6, U-Net++ — 2023 – Present

- *Benchmarked Ark-6 vs. U-Net++ on MedMNISTv2 2D (58k) and 3D (1k), analyzing accuracy and standard deviation with accuracy metric AUC.*
- Analyzed trade-offs in accuracy and training complexity between Ark-6 and U-Net++ models on 2D and 3D tasks.

Computer Vision for Autonomous Vehicles | YOLO, Python — Summer 2022

- *Implemented YOLOv3 object detection in Python, training on 10k+ labeled images for vehicle and pedestrian protection to promote driving safety.*

EXTRACURRICULAR EXPERIENCE

Software Developers Association (SoDA), Tempe, AZ — Fall 2024 – Present

- *Engaged in coding challenges and group projects in weekly SoDA workshops, strengthening algorithms and debugging skills.*

Hacker Devils, Tempe, AZ — Fall 2024 – Present

- *Solved 5 LeetCode problems weekly (Easy, Medium, Hard) to build coding interview fluency and achieved 50+ problems completed in 2024-2025.*