

Xingyi Yang

📍 9500 Gilman Dr, La Jolla, CA 92093

✉ x3yang@eng.ucsd.edu • 🌐 adamdad.github.io

RESEARCH INTEREST

- **Sample-efficient learning:** Self-supervised learning, weak-supervised learning and transfer learning
- **Machine learning for Healthcare:** Medical image analysis and diagnosis, Medical report generation

EDUCATION

University of California, San Diego(UCSD)

Msc. SIP, Electrical and Computer Engineering, Jacobs School of Engineering

La Jolla, USA

Sept. 2019- Present

Southeast University

B.Eng. Computer Engineering

GPA: 3.71/4, 88.1/100

Nanjing, China

Sept. 2015-Jun. 2019

University of Ottawa

Visiting Student, Electrical and Computer Engineering

Ottawa, Canada

Jun. 2018-Sept. 2018

PUBLICATIONS

- **Xingyi Yang**, Yong Wang, Robert Laganière. *A scale-aware YOLO model for pedestrian detection*, 2020, International Symposium on Visual Computing(**ISVC 2020**) (Oral).
- Rui Zhu, **Xingyi Yang**, Yannick Hold-Geoffroy, Federico Perazzi, Jonathan Eisenmann, Kalyan Sunkavalli, Manmohan Chandraker. *Single View Metrology in the Wild*, 2020, 16th European Conference on Computer Vision(**ECCV 2020**).
- Xiao Xu*, **Xingyi Yang***, Yijun Chen*, Yining Hu, Lizhe Xie and Zheng Wang. *Information Redundancy Minimization for Adversarial*, 2019 in **Macao**, The International Joint Conference on Artificial Intelligence, Artificial Intelligence Business Security Workshop(**IJCAIW 2019**).

PREPRINT

- **Xingyi Yang***, Xuehai He*, Yuxiao Liang, Yue Yang, Shanghang Zhang, Pengtao Xie. *Transfer Learning or Self-supervised Learning? A Tale of Two Pretraining Paradigms*, 2020, Under Review.
- **Xingyi Yang**, Nandiraju Gireesh, Eric Xing, Pengtao Xie. *XRayGAN: Consistency-preserving Generation of X-ray Images from Radiology Reports*, 2020, Under Review.
- **Xingyi Yang**, Xuehai He, Jinyu Zhao, Yichen Zhang, Shanghang Zhang, Pengtao Xie. *COVID-CT-Dataset: A CT Scan Dataset about COVID-19*, 2020, Under Review.
- Wenmian Yang, Guangtao Zeng, Bowen Tan, Zeqian Ju, Subrato Chakravorty, Xuehai He, Shu Chen, **Xingyi Yang**, Qingyang Wu, Zhou Yu, Eric Xing, Pengtao Xie. *On the Generation of Medical Dialogues for COVID-19*, 2020, Under Review.
- Xuehai He*, **Xingyi Yang***, Shanghang Zhang*, Jinyu Zhao, Eric Xing and Pengtao Xie. *Sample-Efficient Deep Learning for COVID-19 Diagnosis Based on CT Scans*, 2020, Preprint.

RESEARCH EXPERIENCE

AI-for-Healthcare Lab, UC San Diego

Research Assistant

Supervisor: Prof. Pengtao Xie

Oct. 2019-Present

- Comparative study between self-supervised pretraining learning and supervised pretraining.
- Consistency preserving multi-view X-rays generation from radiography reports.
- Sample-efficient diagnosis of COVID-19 based on CT.

Rose-ML-Lab, UC San Diego

Supervisor: Prof. Rose Yu

Research Intern

Jul. 2020-Present

- Neural point process for spatio-temporal event modelling.

Pennsylvania State University

Supervisor: Prof. Fenglong Ma

Research Intern

Jul. 2020-Present

- Retrieval-guided medical report generation.

VIVA Lab, University of Ottawa

Supervisor: Prof. Robert Laganière

Research Assistant

Jun. 2018-Sept. 2018

- Design scale-aware YOLOv3 model to solve the scale variation for pedestrian detection.
- Implement [MobileNet-YOLOv3](#) and conduct comparative study of CNN based detector: SSD, LSTM-decoder and YOLOv3 on face detection.

Image Processing Lab, Southeast University

Supervisor: Prof. Yining Hu

Research Assistant

May. 2018-Jun. 2019

- 3D skull-to-face reconstruction from CT slices using WGAN-GP
- One-stage remote sensing arbitrary-oriented object detection.

PROFRSSIONAL EXPERIENCE

Kneron, Inc

La Jolla, USA

Deep Learning Intern

Oct. 2019- Jan. 2020

- Post-training 8-bit quantization of neural network.

ArcSoft Technology Co., Ltd.

Nanjing, China

Deep Learning Intern

Mar. 2019- May.2019

- Single-image super-resolution based on semantic segmentation prior.

Chongqing Yiwoke Science Technology Development Co., Ltd.

Chongqing, China

Java development intern

Jul. 2017- Sept. 2017

- Back-end development of Tianpeng bidding platform.

AWARDS AND CERTIFICATES

- 12th/2519 place(Defence) on IJACI-19 Alibaba Adversarial Vision Challenge
- 4nd place on Alibaba AI Security Program
- 2018 MCM/ICM Meritorious Winner Prize
- China College Students' Entrepreneurship Competition National Silver Award

Academic Services

- Conference Reviewer for IJCAI 2021, ICASSP 2020