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GRADUATE, COMPUTER SCIENCE, COLUMBIA UNIVERSITY

Ziniu Liu

EDUCATION	Columbia University Master of Science, Computer Science Core Courses: • Artificial Intelligence • Reinforcement Learning • Computational Aspect of Robotics
	Fudan University (FDU), Shanghai, China Bachelor of Science, Computer Science and Technology Sept.2017 - Jun.2021 GPA: 3.51/4; (top 25% in department) Core Courses: • Mathematical Analysis • Linear Algebra • Introduction to Computer System • Introduction to Algorithms • Pattern Recognition • Computer Vision
RESEARCH EXPERIENCES	Computer Vision Group, Fudan University Supervisor: Prof. Yugang Jiang, Dr. Hao Zhang, Dr. Jingjing Chen Sept.2019 - Jun.2021 - Implemented a novel architecture for AVA actions detection based on I3D and TSM - Proposed and implemented a novel three-stream architecture for video action detection - Create a new video description model using relation and distance to improve performance - Won third place in ACM MM Grand Challenge as a team member - Led a team to participated in Tencent Advertising Algorithm Competition
Internship	Shenzhen Wisonic Co., Image Algorithm Intern Supervisor: Bing Yao, technical director of AI group - Used Matlab to process data and accomplished a neural network for OB's index plane ultrasonic images' classification - Constructed a module for getting saliency maps from feature maps back-propagation - Researched the Capsule Network, and tested its performance
Projects Experience	MiniCovidNet for COVID-19 By Pytorch Description: Create a Lightweight Neural Network on chest X-ray images for COVID-19 de- tection. Achieved 96% accuracy on the test set while maintaining high speed.
	Second-hand Information Exchange Platform By JavaScript & WeChat Mini Program Description: Develop a second-hand information exchange platform as team leader. This App is designed for Fudan University's students and is greatly welcome.
	Books Reader(Github Link) By Python & Socket Description: A Book Reader that has server-side and client-side communicate by network. GUI is based on Tkinter and encryption transmission is based on Crypto.
Awards & Achievements	2020 Outstanding Member of FDU (top 10%) 2020 Third Prize for Excellent Student Award 2019 Third Prize for Excellent Student Award 2018 Third Prize for Programming Competition of FDU
PUBLICATION	Person-level Action Recognition in Complex Events via TSD-TSM Networks Yanbing Hao, Ziniu Liu, Hao Zhang, Jingjing Chen ACM Multimedia (MM) 2020
Skills	Language: Chinese (native) Programming Languages: C, C++, Python, Languages, Matlab, Java, SQL Framework: Pytorch, OpenCV Other Tools: Github, Adobe Photoshop, Office