EDUCATION

The University of Hong Kong	PhD Candidate of Computer Science	2022.9-Now
Zhejiang University	Master of Electrical Engineering	2017.9-2020.6
École Centrale Marseille (France)	Master of Information Science (Double Degree)	2015.9-2017.6
Zhejiang University	Bachelor of Electrical Engineering (GPA:3.76/4, Top 5%)	2013.9-2017.6

WORK EXPERIENCES

Alibaba Senior Algorithm Engineer

Segmentation Annotation Tool: Interactive segmentation and matting tools that support users to extract masks easily. The official annotation tool for all Alibaba Group.

Taobao Image Editing Platform: Image selection and editing platforms for Taobao. Including image inpainting, outpainting, super-resolution, harmonization.

One paper for CVPR2022; One paper for ICCV2021 (Taobao 2021 best paper); 3 patents.

AISegment.cn Senior Consultant

Participate in the strategy design, model optimization for image/video human segmentation/matting.

Face++ Research Intern

Video Object Segmentation: Efficient VOS system, One Paper accepted by CVPR2020.

Visual Tracking: Second Place Solution for Real-Time Tracking on VOT2019(ICCV workshop). Video Analysis: Co-Maintainer of public codebase MegviiDetection/video analyst with 700+ Stars.

SenseTime Research Intern

High Order Attention: Extend non-local networks to high-order form.

OpenImage Competition: Leveraging the co-occurrent relation among categories.

Hikvision Research Intern

Portrait Parsing in the Wild: Segment human and parse different portrait parts (eyes, nose, ears, sunglasses, etc.) in complicated scenes. We use aligned prior mask to filter distractors and propose a boundary hard pixel mining strategy.

UFOTO Algorithm Intern

Real-Time Portrait Segmentation for image/videos on mobile phones.

Laboratoire d'informatique fondamentale de Marseille Research Intern 2017.6-

Gravity Decision Lattice: We propose a new data classifier based on lattice structure and graph theory. Our method outperforms decision tree/ random forest on several data classification sets.

AWARDS & HONORS

Taobao 2021 Best Papers of Alibaba	2021-2022
VOT2019 ICCV Workshop (Second Place for Real-Time Object Tracking)	2019-2020
CSC National Scholarship for Studying Abroad	2015-2017
Second Class Scholarship of Zhejiang University	2013-2014
Excellent Student Awards of Zhejiang University	2013-2014

PUBLICATIONS

Google Scholar Citation [Link]: 500+ GitHub Stars: 700+

Open-vocabulary Panoptic Segmentation with Embedding Modulation

Xi Chen, Shuang Li, Ser-Nam Lim, Antonio Torralba, Hengshuang Zhao

Submission for ICCV2023

ScribbleSeg: Scribble-based Interactive Image Segmentation

Xi Chen, Yau Shing Jonathan Cheung, Ser-Nam Lim, Hengshuang Zhao

Submission for ICCV2023

Detecting Everything in the Open World: Towards Universal Object Detection

Zhenyu Wang, Yali Li, Xi Chen, Ser-Nam Lim, Antonio Torralba, Hengshuang Zhao, Shengjin Wang

Computer Vision and Pattern Recognition (CVPR), 2023. Top Conference.

FocalClick: Towards Practical Interactive Image Segmentation

Xi Chen, Zhiyan Zhao, Yilei Zhang, Manni Duan, Donglian Qi, Hengshuang Zhao.

Computer Vision and Pattern Recognition (CVPR), 2022. Top Conference. [Code Link]

Conditional Diffusion for Interactive Segmentation

Xi Chen, Zhiyan Zhao, Feiwu Yu, Yilei Zhang, Manni Duan.

International Conference on Computer Vision (ICCV), 2021. Taobao 2021 best papers of Alibaba. [Code Link]

Implicit Non-local Network

Yifeng Han, Xi Chen, Songjie Zhang, Donglian Qi.

Neurocomputing 2021 (Top Journal).

State-Aware Tracker for Real-Time Video Object Segmentation

Xi Chen, Zuoxin Li, Ye Yuan, Gang Yu, Jianxin Shen, Donglian Qi.

Computer Vision and Pattern Recognition (CVPR), 2020. Top Conference. [Code Link] 700 stars

A Unified Algorithm for Object Tracking and Segmentation and its Application on Video Surveillance for Transformer Substation

Xi Chen, Yifeng Han, Yunfeng Yan, Donglian Qi, Jianxin Shen.

Proceedings of the CSEE (PCSEE), 2020. Top Chinese Journal.

Siamese Fully Convolutional Object Tracking

Weizhao Wang, Xingyu Chen, Xi Chen, Yinda Xu, Zeyu Wang.

Second Place on Visual Object Tracking (VOT) challenge 2019. ICCV Workshop. [Code Link]

PROFESSIONAL ACTIVITIES

Reviewer of: CVPR, ICCV, ECCV, AAAI, ect