DONG Qihua

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Github: https://github.com/dddraxxx

EDUCATION

2017 Sept - 2021 July	**B.Sc. in Computer Science,** City University of Hong Kong, Hong Kong (HK)
	Minor in Mathematics

- CGPA 3.89 (Top 5%), Major GPA 3.95, Minor GPA 4.08

ENGLISH TEST GRADES

TOEFL	109
GRE	330 + 3.5

EXPERIENCE

Research Assistant   *2021 Aug - Now*
Department of Computer Science, City University of Hong Kong, HK
- Supervised by Professor **Liao Jing** and worked on **computer vision**, especially **3D medical image segmentation**

Student Research Assistant   *2020 Sept - 2021 Feb*
Department of Computer Science, City University of Hong Kong, HK
- Supervised by Professor **Wang Jianping** and researched system **scheduling** schemes for **self-driving** tasks

Full-stack Programmer, Internship   *2019 Sept - 2020 June*
Sik Sik Yuen, HK
- **Developed** an app that identifies the emotion of users as well as **maintained** the existing app and web service

Publications

- Du Hao*, **Dong Qihua*,** Xu Yan, Liao Jing. "**Weakly-Supervised 3D Medical Image Segmentation using Geometric Prior and Contrastive Similarity**". Submitted to *IEEE Transactions on Medical Imaging, 2022*.

- He Ruozhen*, **Dong Qihua***, Lin Jiayin, Rynson Lau. "**Weakly-Supervised Camouflaged Object Detection with Scribble Annotations**". Submitted to *Proc. NeurIPS, 2022*.

Projects

Proper Initialization of 3D models   *2022 May - Now*
- Explore how to transfer the learning weights of 2D models, both spatiotemporally and 3D spatially.

Weakly-Supervised 3D Medical Image Segmentation Framework   *2022 Feb - 2022 May*
- Used prior geometric knowledge to guide the segmentation of medical images, and distinguished instances from model representation space

Weakly-Supervised Camouflaged Object Detection   *2021 Dec - 2022 May*
- Proposed a new weakly supervised task with a dataset, and a method that exceeded baseline laregely

Swin Transformer on 3D Medical Image   *2021 Aug - 2022 Jan*
- Applied 3D swin transformer to segment medical images.

ACADEMIC AWARDS AND SCHOLARSHIPS

2019	**Bronze Medal**, The 2019 **ICPC** Asia Nanchang Regional Contest, Jiangxi Normal University, China
2017 - 2021	**Dean's List**, City University of Hong Kong, HK
2017 - 2021	**Full Tuition Scholarship**, City University of Hong Kong, HK

Skills

- Computer languages: Python, C++, R, Javascript, Java, CSS
- Tools and library: PyTorch, Numpy, Detectron2, AdelaiDet, mmDet, nnUNet, Scikit-learn, OpenCV
- Athletic: CityU mainland basketball team
- Guitar: Learn by myself and often play by myself!

UNIVERSITY ACTIVITIES AND COMMUNITY SERVICE

2019	**Outstanding Athlete** in Professor Edmond Ko Cup's Relay Competition, City University of Hong Kong, HK
2018	**City-Youth Empowerment Project**, City University of Hong Kong, HK

- Organized and delivered English interview workshops for underprivileged primary school students

2018	**Stellar Social Practice Project**, Fudan University, Shanghai

- Visited villages in Yunnan Province to explore and promote Yi minority culture