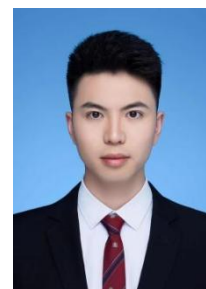


Chaowei LIU

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EDUCATION

- **National University of Singapore** 08/2022-01/2024
➤ Master of Computer Engineering (Machine Intelligence and Applications) Singapore
➤ GPA:4.67/5;
➤ Join Learning and vision lab
- **National University of Singapore-NUS(Suzhou) Research Institute** 09/2021-05/2022
“3+1+1” Educational Framework SuZhou,China
➤ Major in Electrical and Computer Engineering
➤ GPA:90.25/100; **Outstanding Graduation Project(10%)**
- **Harbin Institute of Technology, Shenzhen (HITSz)** 09/2018-06/2022
Bachelor of Science in Communication Engineering Shenzhen, China
➤ GPA:85.1/100; **Outstanding Graduates(10%),Second Class Honor Scholarship(15%), Excellent Student Honor**

PUBLICATION

[On the feasibility of specialized ability stealing for large language code mode](#) (Arxiv, fourth author)
[Lens-to-Lens Bokeh Effect Transformation. NTIRE 2023 Challenge Report](#) (CVPR2023W, Challenge Report)
[MetalSP: Efficient RAW to sRGB Mappings with Merely 1M Parameters](#) (Under review on AAAI24, Co-first author)
One paper for multi-degradation issues in document images would be submitted to CVPR2024 (first author)

RESEARCH/PROJECT EXPERIENCE

- **Learning Robust Enhancer in low-level vision** 09/2022-04/2023
NUS master project Singapore
instructed by Professor [Xinchao Wang](#)
➤ Trying to apply diffusion model in low-level vision tasks (AWB, RAWtoRGB)
➤ Trying to apply MobileVit in low-level vision tasks (RAWtoRGB) (**Under review on AAAI24**)
➤ Attending CVPR NTIRE2023 Bokeh Effect Transformation(**Leader,Third Place**)
- **Research on data augmentation strategy of graph neural network**
Final Year Project
Outstanding Graduation Project (NUS Suzhou Research Institute) 09/2021-05/2022
instructed by Professor [Xinchao Wang](#) Su Zhou,China
➤ Propose a new data augmentation strategy of graph neural network based on changing feature matrix.
➤ Propose a hyperparameter search algorithm based on reinforcement learning which outperform optuna.
➤ Achieve up to 7% absolute F1 performance improvements across architectures and datasets.

- **Research on the Mura Defect Inspection of AMOLED Screen**

Act as core member, College Students' Innovation & Entrepreneurship Project (CSIEP)

Won National First Honor Prize in CSIEP

Shenzhen, China

instructed by Professor [Xiao Junjun](#)

09/2019-09/2021

- Utilized deep learning network yolo-v3 to successfully train Mura defect inspection network
- Achieve high accuracy of 80% ,thus providing support for the production of screen automation.

- **Smart Garbage Car**

Act as core member, Term Project

The First Project Approval Prize of Harbin Institute of Technology, Shenzhen

Shenzhen, China

instructed by Professor [Li Wei](#)

11/2018-12/2019

- Programmed MCU driving code based on Arduino language and designed a robotic arm model to grab and lift the rubbish bin by using Solidworks.
- Compiling all functions in the tested APP and completed automatic and remote control.

INTERNSHIP EXPERIENCE

- **HUAWEI TECHNOLOGIES CO, LTD**

7/2023-now

● *Algorithm Researcher*

Shanghai, China

- Conducted research on multi-degradation issues in document images, developing a model that outperforms existing solutions in both industrial settings (Xiaomi, Quark) and academic research.
- Filed one patent related to the innovative model, and a research paper is currently being prepared for submission to CVPR 2024.

- **DIDI TRAVEL TECHNOLOGIES CO, LTD**

2/2022-4/2022

Algorithm Engineer

BeiJing, China

- According to the driver's voice to text data, using textcnn and Bert model, to construct the suspected crime alarm model.
- Compared with the original model of the company (XGBT). My model's accuracy increased by 20%, the regression rate increased by 10%, and the influence area decreased.
- Research frontier papers, organization sharing.

- **HUAWEI TECHNOLOGIES CO, LTD (SHENZHEN)**

6/2021-8/2021

Engineer

Shenzhen, China

- Be responsible for completing the software construction and maintenance of the supply chain system;
- Optimizing API performance problems in database problems.

PERSONAL SKILLS

Python, C++, C and Java Language, Pytorch, DGL, MATLAB, Latex