Wonboem Jang

The Researcher dreaming of a world where everyone uses Al

Name: Wonbeom Jang Location: Seoul, South Korea Github: github.com/wonbeomjang

Homepage: https://www.wonbeomjang.kr/

Email: jtiger958@gmail.com

Skill Set —

Machine Learning Pytorch Tensorflow
Backend Django MySQL
Programming Language Python C++
Language Korean English

Etc. Git Wandb AWS Docker

Introduce —

I am an undergraduate researcher who studied at CVML Lab at Chung-Ang University. I like practical research such as Efficient AI, Edge AI. My advantage is quick study and implementation skill ability. I can quickly read many papers, export key idea of those paper and verify my hypothesis. I'm interested in open source, so open my project and get over 300 stars. I also contribute on other opensource projects.

Career —

2023.01 - 2023.08 : Research Intern in Neurocle

- Character-based Pretrained-OCR
 - · Make OCR weight to deploy auto-labeling.
 - Improve OCR accuracy 4%p and decrease training time to 1/3 when using finetuning.
- Smart-labeling on object detection and semantic segmentation
 - · Check performance and hardware usages.
 - · Convert model to ONNX.
 - · Improve post-processing time.
- Transfer Learning
 - Check performance and make user-guide

2019.08 - 2020.08: Undergraduate Researcher at CVML Lab, Chung-Ang University

- Support and performance check of DPSGAN experiments.
- Support Lightweight MDADN Experiment.

Paper —

2021

Deep-plane sweep generative adversarial network for consistent multi-view depth estimation. <u>Mach. Vis. Appl. 33(1): 5</u> (2022); 2nd author

- Collect evaluation data and convert enterprise-provided data.
- Verify and analysis the DPSGAN.
- Presenting the ideas of the model structure.

Awards —

2021

Military Disclosure SW Online Hackathon: Navy Chief of Staff Award; Incentive Award

2019

Barrier-Free App Development Contest: Encouragement Award

Education —

2018.03 - 2024.02: Department of Software, Chung-Ang University; BS (GPA 4.41 / 4.5, Rank: 1/108)

Activity —

2023.03 DAMO-YOLO; Open source contribution

- tinyvision/DAMO-YOLO/pull/86

2019.02 - 2021.02: administrator of prography

- Perform the role of PM
- Attract Hyundai Asan Nanum Foundation Investment

Toy Project —

2022

Gripp: Climbing Video Classification and Automatic Editor - cannot-climb/gripp-deep

- Design video editing and classification algorithm (object detection + pose estimation)
- Analyze the problem of model and data and derive solutions. (Improve recall 2%p, precision 1%p)
- Collect and evaluate data.
- Creating a model serving server (Django)

2021

Canary: Automatic mosaic for military photographic use - AI_APP_WEB_Canary_Canary_2021, yolov5-knowledge-distillation

- Implement knowledge distillation on YOLOv5.
- Analyze the problem of model and data and derive solutions. (Improve mAR 4.3%p)
- Build an administrator server for log collection and deploying the latest models.
- Open source code of YOLOv5 knowledge distillation (Star 75).

2019

ZipYak: Pharmaceutical Information Service for the Visually Impaired by using a Camera - Summary of Project

- Design a medicine box recognition algorithm through a camera.
- Conduct user interviews and design user-friendly mobile application.

Photo Filter Application - ESRGAN, cyclegan, neural-style-transfer-pytorch

- Implement Style transfer using CNN, CycleGAN, ESRGAN
- Open the code of ESRGAN (Star 83)

2018

Hair segmentation for mobile device - HairMatteNet

- Implement and improve HairMatteNet
- Improve performance and reduce inference time through backbone changes and quantization.
- Improve IOU 0.75%p, inference time 42.9% and decrease model size 56%.
- Apply tensorrt to the project
- Open the code of HairMatteNet (Star 136)