RESUME

Introduce

- Name: Eunseop Shin
- Interesting area: Deep Learning, Model Compression, Machine Learning, Computer Vision, Cloud Computing
- Military Searvice: Not Yet (**Looking for a job as a Technical Research Personnel!**)
- Email: kairos9603@gmail.com
- GitHub: github.com/kairos03
- LinkedIn: linkedin.com/in/kairos03

학력

- Kyunghee University Graduate School, Computer Science and Engineering Dep, Attending(2020.03 ~ 2022.02(Expected Graduation Date))
- Kyunghee University, College of Electronic and Information, Computer Science and Engineering Dep, Graduated (2015.03 ~ 2020.02)
- Korea Digital Media High School, Hacking Defense Dep, Graduated (2012.03 ~ 2015.02)

경력

- KIST-Europe, Intern. (2017.09 ~ 2018.01)
- Kakao corp., Game business part A-TF Team. (2017.06 ~ 2017.07)

출판 논문

Global Weight: Network-level weight sharing for deep neural network compression

- Eunseop Shin, Sung-Ho Bae(Kyunghee Univ.)
- Korean Institute of Broadcast and Media Engineers, 2020 Summer Conference, Oral.
- In order to compress a large-sized deep neural network, we propose a global weight method, a network-level weight sharing method. The existing weight sharing method used to reuse and share weights for each layer and block. Unlike the existing method, Global Weight is an efficient method of sharing weights across the entire network.
- paper presentation

A New Neural Architecture Search Using Self-Attention Operation

- Eunseop Shin, Sung-Ho Bae(Kyunghee Univ.)
- Korea Software Congress KSC2019, Undergraduate student poster.
- Existing DARTS only had very simple operations as candidates. The self-attention operation showed good performance in the model found by humans. Therefore, we constructed a new search space by adding the Self-Attention calculation to the DARTS search space.
- paper

A New Deep Learning based Object Detection Method using a Deep Estimation Backbone Network Model

- Eunseop Shin, Seoungwoo Pyo, Sung-Ho Bae(Kyunghee Univ.)
- Korea Computer Congress KCC2019, Undergraduate student poster.
- Existing DARTS only had very simple operations as candidates. The self-attention operation showed good performance in the model found by humans. Therefore, we constructed a new search space by adding the Self-Attention calculation to the DARTS search space.
- paper poster

Monocular Image Depth Estimation using Synthetic Soccer Data based on Deep Neural Networks

- Eunseop Shin, Youmin Kim, Sung-Ho Bae(Kyunghee Univ.)
- Korea Software Congress KSC2018, Undergraduate student poster.
- Unlike the existing depth prediction, it is difficult to acquire data with a sense of depth in soccer images. To solve this problem, data was acquired from the FIFA game where it is easy to acquire data with a sense of depth, and the depth of the actual soccer image was more accurately predicted by performing style conversion between the real image and the virtual image.
- Best Paper Award(2nd)
- paper poster

Deep Learning Application of AuNP Interaction Analysis with Genetically Engineered FD-Viruses

- Moon-Hyeok Song, Eunseop Shin(Kyunghee Univ.),Yong Oh Lee, Jun Jo, Leon Abelmann, Nuriye Zirpel(KIST-Europe)
- Korea Computer Congress KCC2018, Undergraduate student poster.
- YOLO v2, an ObjectDetecion method based on DeepLearning, was used to simulate the interaction of gold nanoparticles and genetically engineered FD-virus.
- Best Paper Award(3rd)
- paper

Technology used

Deep Learning and Machine Leraning

I can implement the latest deep learning technology, do my own research and improve performance.

- Python
- Pytorch(main)
- Tensorflow, keras(sub)
- Scikit-learn
- Data analysis(Pandas)
- Visualization(matplotlib)
- Learning logging(Tensorboard, sacred, neptune)

Web

I can build a simple prototype or create a web dashboard.

- Backend
    - Nodejs(koa, express)
    - Mysql, Mariadb, SQLite
    - Firebase
- Frontend
    - Nodejs(Vue.js, Vuetify)

Cloud Computing, DebOps

I can use Docker to Dockerize and deploy services, and I have more than 1 year of experience in building and operating Kubernetes clusters.

- Docker
- Kubernetes
- Ansible
- AWS
- GCP

Process

- Monitoring - prometheous, kibana, sentry
- Communication - slack
- Issue Tracking - Github
- CI/CD - TravisCI, CircleCI, Jenkins
- Version Control - Git, GitFlow

TODO

Learn new things and strive to be the best and first.
I think it is the developer who has to constantly study.
Currently, I am studying the following things.

- DeepLearning(Kwoege Distillation, Efficient Model Design)
- Hybrid cloud

Project

Projcet Ocean

- Intro: GPU cloud service for deep learning in the lab
- Date: 2020.02 ~
- Position: Kyunghee University MLVC Lab Master student, Infrastructure Team Leader.
- Role: kubernetes cluster DevOps, gpu instance and job submit Web Application DevOps.
- Related Tech: Kubernetes, Docker, nodejs, express, vue, firebase, ansible, nfs.

PCB design error detection using deep learning

- Intro: Developing a model that detects and detects PCB board design errors before making them in the factory.
- Date: 2019.04 ~ 2019.12
- Position: Kyunghee University MLVC Lab, Undergraduate research student.
- Role: Data analysis, Model training, REST API and C++ library development for interworking with existing programs, Development report writing.
- Related Tech: Classification(Resnet), Django.

Deep learning application of gold nanoparticles and genetically engineered FD-virus interaction analysis

- Intro: To analyze the interaction between gold nanoparticles and genetically engineered FD-virus, the simulation was analyzed with ObjectDetection model.
- Date: 2017.09 ~ 2018.01
- Position: KIST-Europe SmartConvergenceTeam, Intern.
- Role: Simulation data labeling, ObjectDetection Model (YOLO v2) implementation and training, paper writing.
- Related Tech: ObjectDetection(YOLO v2).

Twenty Go Quiz Games (for AI Speaker)

- Intro: Twenty-Go Quiz Game development for Kakao i artificial intelligence speaker.
- Date: 2017.06 ~ 2017.07
- Position: Kakao corp., Game business part A-TF Team.
- Role: Twenty-Go Quiz Data collection and processing. Machine learning model training, inference endpoint development.
- Related Tech: Data Crawling(Selenium, Beautiful soup), Machine learning(scikit-learn), MySQL, Flask.

Open source contribution

Ocean

- Personal Project
- on-premis GPU cloud service for deep learning
- GitHub (To be disclosed)

Kairos-smi

- Personal Project
- Multi-Node nvidia-GPU Monitoring CLI
- CircleCI, pypi package.
- GitHub

Openstack

- I18n Participation in Translation
- openstack-i18n Typo correction Commit
- Openstack-kr Upstream Participation in the event(2017)