Valikhujaev Yakhyokhuja

AI Research Engineer

GitHub | LinkedIn | Google Scholar | Stack Overflow | Gmail |☏ 010 9363 7088

More than 2 years experience in ML/DL tasks including Object Recognition, Detection, Generative Adversarial Networks, Model Optimization and Implementing SOTA models. A big fan of ML/DL related high-ranking Computer Vision Conferences.

EXPERIENCE

D-Meta Co | 2020.11.18 - present

AI Research Engineer

- Optical Character Recognition.
    - Scene Text Recognition customized version of Deep Text Recognition method(STN-ResNet-BiLSTM-Attn).
    - Scene Text Detection using CRAFT text detection method(U-net based) and Object Detection Method(Customized YOLOv5).
- Automatic Number Plate Recognition(**ANPR**) using Object Detection Methods(Customized YOLOv5):
- Number plate generator with YOLO format labels(Korean Number Plate Generator)
- Car Damage detection using Object Detection(Customized YOLOv5-small).
- Deployment of Car Damage Detection model on Android OS.
- Shadow Removal on Car Surface using **Generative Adversarial Networks**(**CycleGAN**, **MaskShadowGAN**).
- Implemented SOTA Object Recognition/Detection/Segmentation Models.

AI&SC Lab | 2018.09.01 - 2021.03.01

AI Researcher

- Machine Learning based Recommendation System.
- Development of Android app to Control Devices via Bluetooth.
- Fire and Smoke Recognition from Image data using Atrous Convolutions.
- Deploying Object Detection methods on Edge devices.

OSG Ltd | 2018.01.01 - 2018.05.01

Frontend Developer Intern

- Web design development using HTML, CSS, BootStrap, JS, JQuery.
- Developed a Website using CodeIgniter(PHP backend framework).
- Experienced using Document Object Model(DOM) and Model View Controller(MVC).

EDUCATION

MS in Computer Engineering, Gachon University | 2018.09.01 - 2021.02.24

- GPA: 4.01 / 4.5
- Courses: Artificial Intelligence, Advanced Artificial Intelligence, Algorithms, Advanced Algorithms, Image Processing, Computer Networks.
- Thesis: Automatic Fire and Smoke Detection Method for Surveillance Systems based on Dilated CNNs.
- Awards:
    - Best paper award from **FISK** (Fire Investigation Society of Korea).
    - Best presentation award from **ISIS2019 & ICBAKE2019**.

BS in Computer Engineering, TUIT | 2014.09.01 - 2018.06.12

- GPA: 85 / 100
- Courses: Linear Algebra, Calculus, Probability and Statistics, Programming in C++/Java, Algorithms, Data Structures, Desktop and Web Application Development.
- Projects:
    - Developed a Desktop App for English Language Learners using C++.
    - Developed a Web App for Online Car Sale using PHP.

SKILLS

Technical:

- Python: NumPy, Scikit-learn, PIL, Matplotlib, Pandas, OpenCV, PyTorch, TensorFlow, Keras.
- Java: Tensorflow Lite and PyTorch Inference.
- PyTorch: MobileNetV1/V2/V3, DarkNet53, YOLOv1/YOLOv3/YOLOv5, DeepLabV3, EAST/CRAFT and Deep Text Detection and etc are implemented and uploaded to GitHub.
- Version Control and Team Collaboration(Git/GitHub).
- Coding: Problem-solving, Competitive programming.
- Experience using Docker and Multi-GPUs(Training/Testing/Deployment).
- Experience on Code Review/Debugging.

Soft:

- Open-minded and Adaptable.
- Determined and decisive: Uses initiative to develop effective solutions to problems.
- Emotionally mature: Calming and positive temperament, tolerant and understanding.
- Strong planning: Organizing and monitoring abilities.

PUBLICATIONS:

- Automatic Fire and Smoke Detection Method for Surveillance Systems Based on Dilated CNNs, 2020.
- Automatic Fire and Smoke Detection System for Open Street CCTV Systems in Smart City Platforms, 2019.