

RAKHMATOV SHOHRUH

Team Leader | Senior AI Engineer

in www.linkedin.com/Shohruh Rakhmatov 📍 Republic of Korea, Seoul

☎ + (82) 10 8293 5575 @ shoh.mirzo786@gmail.com Portfolio

Experienced computer vision engineer with 6 years of expertise in developing cutting-edge solutions for interpreting visual information. Proven track record in AI, ML, and image processing for various industries. Expertise in complex algorithm design, performance optimization, and deep learning. Passionate about staying updated with advancements and driving excellence in computer vision.

COMPETENCES

Areas of Expertise	Deep Learning, Motion Analysis, and Tracking, Digital Image Processing and Analysis, Object Detection and Recognition, Semantic/Instance/Panoptic Segmentation, Image Synthesis, Image Classification, Medical/Fabric Image Processing, Transformation
Programming	Python [OpenCV, Numpy, Dlib, Scikit-learn, Pandas, PIL, Scikit-image, Matplotlib,]
Frameworks	PyTorch, TensorFlow, Keras, MxNet and PaddlePaddle.

EXPERIENCE

April 2021 - Present	DELTAX CO.LTD, SEOUL, Korea Projects developed with roles : <ol style="list-style-type: none">1. Team Lead<ul style="list-style-type: none">> Prediction technology based on Surround multi cameras for Lv.4 Autonomous Driving Vehicles.> Merged perceptual SW and optimization of AI neural network with multi-sensor data for autonomous driving> Lightweight segmentation model to detect lanes, roads, and drivable areas.> Object detection, capable of detecting objects both with and without labeled data.> Occupation Monitoring System (OMS) solution for Edison Motors' self-driving vehicles> Smart Cabin Monitoring System<ul style="list-style-type: none">> Driver drowsiness and distraction.> Head pose estimation using an IR camera> Recognition of the driver and passengers' actions (distraction, gaze estimation, recognition of items on the left, seatbelt detection, and occupancy detection)> Analysis of facial attributes, such as age, emotion, and gender2. Senior Researcher<ul style="list-style-type: none">> Implementation of a lightweight face detection and landmark extraction module based on deep learning, aimed at detecting Deep Fakes.> Research and Developed XVision technology using deep learning methods to analyze nudity content from feature-length videos> Welding defect detection in electromotive manufacturing.> LG Display —
Mar 2019 - Nov 2021	HYUNDAI MIB INTERNATIONAL, SEOUL, Korea Projects developed with roles : <ol style="list-style-type: none">1. AI/ML Research Engineer<ul style="list-style-type: none">> Developed a lightweight counterfeit detection model.> Implemented a lightweight recognition model for currency recognition.> "The Smart Mirror Project" - Developed a Real-time Age-Gender-Race Detection Model> Vehicle inspection system to detect damaged parts.> Comparison of Spatial and Frequency Images in character recognition> Developed Steel Surface Defect Detection Model.

May 2018 - Nov 2019	Tashkent University of Information Technology, TASHKENT, Uzbekistan Projects developed with roles : <ol style="list-style-type: none"> 1. Research Engineer <ul style="list-style-type: none"> > Ultra-lightweight facial authentication system for Payment. > Multi-Camera-based Surveillance system in CCTV environment. <ul style="list-style-type: none"> > Object Detection > Re-Identification > Action Recognition (Fighting/Smoking/Falling and so on.)
Sep 2017 - Jul 2019	CVPR LAB, THE UNIVERSITY'S RESEARCH LAB, Korea Projects developed with roles : <ol style="list-style-type: none"> 1. AI/ML Research Engineer <ul style="list-style-type: none"> > Vision Inspection System for Error Detection in Car Painting System. > Developed Fabric Defect Type Detection model by automatically Focusing on Abnormal pixels. > Implemented Brand Logo Detection Sponsorship Monitoring in Soccer Video. > Developed Facial Wrinkle Detection Model using a semantic segmentation method (IGCV3 + Deeplab v3+) > Defect Detection model using Capsule Networks. > Automatic Number Plate Detection and Recognition. > To remove fog, haze, and noise from images to increase image quality.

PATENTS

2022	SYSTEM FOR MONITORING PASSENGERS WITHIN CABIN OF PASSENGER TRANSPORT VEHICLE.
2021	METHOD OF SELF-DRIVING GOLF CART AND SELF-DRIVING GOLF CART.
2021	PERCEPTION METHOD FOR LOW-SPEED VEHICLE.

ACHIEVEMENTS

2021	1st Place 2021 ICCV Instance Segmentation Challenge. <i>Visual Inductive Priors for Data-Efficient Computer Vision 2021 Instance Segmentation Challenge</i>
2021	Collaborated in Self-Driving Data Contest 2021 Grand Prize, Won Korea Transportation Safety Authority Chairman Award.
2021	Task-Specific Copy-Paste Data Augmentation Method, for Instance, Segmentation, Visual Inductive Data-Efficient Deep Learning Workshop at ICCV 2021.

ACADEMIC BACKGROUND

2017~2019	Master of Computer Engineering (Spec - Computer Vision and Pattern Recognition Lab) Kumoh National Institute of Technology 94/100
2011~2015	Bachelor of Tashkent University of Information Technology 87.5/100

</> LANGUAGES

English	● ● ● ● ●
Uzbek	● ● ● ● ●
Russian	● ● ● ○ ○

+ STRENGTH

- > Innovative, Critical observation
- > Patience, Smart work
- > Quick learner, Motivator
- > Helping, Friendly

“ REFERENCE

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