

Oleksandr [Alex] Bailo

COMPUTER VISION · DEEP LEARNING

✉ alexandr.baylo@gmail.com | 🏠 bailool.github.io | 📱 BAILOOL | 🌐 abailo

Summary

Programming Languages: Python (proficient) • C/C++ (proficient) • Java (prior experience) • MatLab (prior experience)
Technical skills: Pytorch • Caffe • Tensorflow • OpenCV • LaTeX • Git
Languages: Fluent in English, Russian and Ukrainian; Advanced level in Korean.

Experience

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| Qualcomm | MACHINE LEARNING RESEARCHER (SENIOR), XR TEAM | <i>Amsterdam, Netherlands</i> |
| • Researching and developing mobile AR and VR enabling technology | | <i>Jul. 2021 - present</i> |
| AnyVision | DEEP LEARNING RESEARCHER AND SCRUM MASTER | <i>Belfast, UK</i> |
| • Body detection and model evaluation tools to understand application scenario
• Body re-identification
• Replay face spoofing attack detection | | <i>Apr. 2020 - Jun. 2021</i> |
| Kakao Brain | DEEP LEARNING RESEARCH ENGINEER | <i>Seongnam, S.Korea</i> |
| • Human pose estimation and action similarity research for fitness tracking | | <i>Nov. 2019 - Mar. 2020</i> |
| Noul Inc. | COMPUTER VISION & DEEP LEARNING RESEARCH ENGINEER | <i>Yongin, S.Korea</i> |
| • Microscopy diagnosis of malaria. Development from training to edge product integration
• Created hematology analyzer with detection, segmentation, and classification capabilities
• Research on GANs for medical data augmentation resulting in publication | | <i>Aug. 2017 - Oct. 2019</i> |
| Healthrian | SOFTWARE ENGINEER, INTERN | <i>Daejeon, S.Korea</i> |
| • Developed an Android application for ECG medical device | | <i>Jun. 2015 - Aug. 2015</i> |
| My Design Lab • KAIST | UNDERGRADUATE RESEARCHER | <i>Daejeon, S.Korea</i> |
| • Developed a drone to implement wall painting works for skyscrapers | | <i>Dec. 2014 - Jun. 2015</i> |

Education

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|---|--|------------------------------|
| Korea Advanced Institute of Science and Technology (KAIST) | | <i>Daejeon, S.Korea</i> |
| M.S. IN ELECTRICAL ENGINEERING. ROBOTICS AND COMPUTER VISION [LAB.] SUPERVISED BY [IN SO KWEON] | | <i>Sep. 2015 - Aug. 2017</i> |
| • A real-time vehicular vision system to seamlessly see-through cars
• Intelligent assistant for people with low vision abilities
• Machine learning-based autonomous vehicle vision system | | |
| Korea Advanced Institute of Science and Technology (KAIST) | | <i>Daejeon, S.Korea</i> |
| B.S. IN ELECTRICAL ENGINEERING & BUSINESS AND TECHNOLOGY MANAGEMENT | | <i>Sep. 2011 - Aug. 2015</i> |
| • Manager at KAIST International Basketball Club (KIBC)
• Vice President, Public Relations Head at KAIST International Student Association (KISA) | | |

Selected Publications

INTERNATIONAL JOURNALS

- CVIU22** MC-Calib: A generic and robust calibration toolbox for multi-camera systems
IJCV22 Real-Time Multi-Car Localization and See-Through System
Access21 A Body Part Embedding Model With Datasets for Measuring 2D Human Motion Similarity
PRL18 Efficient ANMS for homogeneous spatial keypoint distribution

INTERNATIONAL CONFERENCES

- CVPRW19** Red blood cell image generation for data augmentation using cGAN
ICCV17 VPGNet: Vanishing Point Guided Network for lane and road marking detection and recognition
WACV17 Robust road marking detection and recognition using density-based grouping and ML techniques