■ 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**

**Oualcomm** MACHINE LEARNING RESEARCHER (SENIOR), XR TEAM Amsterdam, Netherlands

Researching and developing mobile AR and VR enabling technology

**AnyVision** DEEP LEARNING RESEARCHER AND SCRUM MASTER Belfast, UK

• Body detection and model evaluation tools to understand application scenario

Apr. 2020 - Jun. 2021

• Body re-identification

• Replay face spoofing attack detection

**Kakao Brain** DEEP LEARNING RESEARCH ENGINEER Seongnam, S.Korea

• Human pose estimation and action similarity research for fitness tracking Nov. 2019 - Mar. 2020

Noul Inc. COMPUTER VISION & DEEP LEARNING RESEARCH ENGINEER Yongin, S.Korea

• Microscopy diagnosis of malaria. Development from training to edge product integration Aug. 2017 - Oct. 2019

• Created hematology analyzer with detection, segmentation, and classification capabilities

• Research on GANs for medical data augmentation resulting in publication

**Healthrian** SOFTWARE ENGINEER, INTERN Daejeon, S.Korea

• Developed an Android application for ECG medical device Jun. 2015 - Aug. 2015

My Design Lab • KAIST Undergraduate Researcher Daejeon, S.Korea

• Developed a drone to implement wall painting works for skyscrapers Dec. 2014 - Jun. 2015

### Education

#### **Korea Advanced Institute of Science and Technology (KAIST)**

Daejeon, S.Korea

Jul. 2021 - present

M.S. IN ELECTRICAL ENGINEERING. ROBOTICS AND COMPUTER VISION [LAB.] SUPERVISED BY [IN SO KWEON]

Sep. 2015 - Aug. 2017

- 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)

Daejeon, S.Korea

B.S. IN ELECTRICAL ENGINEERING & BUSINESS AND TECHNOLOGY MANAGEMENT

Sep. 2011 - Aug. 2015

- Manager at KAIST International Basketball Club (KIBC)
- Vice President, Public Relations Head at KAIST International Student Association (KISA)

# **Selected Publications**

#### INTERNATIONAL JOURNALS

A Body Part Embedding Model With Datasets for Measuring 2D Human Motion Similarity

Access21

Efficient ANMS for homogeneous spatial keypoint distribution **PRI** 18

## 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