

# Oleksandr [Alex] Bailo

COMPUTER VISION · MACHINE LEARNING · RESEARCH ENGINEER

Seoul, South Korea

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## Summary

Programming Languages: C/C++ · Python · MatLab · Java.

Technical skills: Caffe · Tensorflow · Pytorch · OpenCV · Git · Android Studio.

Languages: Fluent in English, Russian and Ukrainian; Advanced level in Korean.

## Education

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

Daejeon, S.Korea

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).

## Experience

### Noul Inc.

Yongin, S.Korea

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Aug. 2017 - Present

- Microscopy diagnosis of malaria: segmentation, classification.
- Complete Blood Count (CBC): object detection, classification.

### K-Healthwear

Daejeon, S.Korea

SUMMER INTERN

Jun. 2015 - Aug. 2015

- Developed an Android application for 12 lead ECG medical devices.
- Implemented real-time graphing functions of received data.

### My Design Lab • KAIST

Daejeon, S.Korea

UNDERGRADUATE RESEARCHER

Dec. 2014 - Jun. 2015

- Devised "Automatized Wall Painting Drone" to implement painting works for the skyscrapers.
- Implemented real-time graphing functions of received data.

### Computer Vision and Image Processing Lab • KAIST

Daejeon, S.Korea

UNDERGRADUATE RESEARCHER

Dec. 2013 - Jun. 2014

- Developed an eye-friendly projector that prohibits a lighting beam from reaching the presenter's eyes.

## Publications

### INTERNATIONAL JOURNALS

**PRL18** Efficient adaptive non-maximal suppression algorithms for homogeneous spatial keypoint distribution

### INTERNATIONAL CONFERENCES

**ICCV17** VPGNet: Vanishing Point Guided Network for Lane and Road Marking Detection and Recognition

Venice, Italy

**WACV17** Robust road marking detection and recognition using density-based grouping and machine learning techniques

Santa Rosa, USA

### OTHER PUBLICATIONS

**arXiv17** Light-weight place recognition and loop detection using road markings

**IPIU16** Area-based decision driven best-buddies similarity method for robust template matching

Jeju, S.Korea