### **VLADIMIR NEKRASOV**

## **EDUCATION**

### UNIVERSITY OF ADELAIDE

Ph.D. IN COMPUTER SCIENCE Aug, 2017 - Nov, 2020 | Adelaide, Australia

Dean's Commendation for Thesis Excellence

Semantic Image Segmentation and Other Dense Per-Pixel Tasks: Practical Approaches

### MOSCOW STATE UNIVERSITY

SPECIALIST D. IN MECHANICS Sep, 2010 - Jun, 2015 | Moscow, Russia GPA: 4.6 / 5.0

Indoor Navigation, Stability & Control Theory, Applied Mathematics

## LINKS

Blog://drsleep.github.io Github://drsleep LinkedIn:// nekrasowladimir Gmail:// nekrasowladimir

# SKILLS

### **PROGRAMMING**

Over 5000 lines: Python • R Over 1000 lines: C • C++ • Matlab • Scala

### **DEEP LEARNING**

PyTorch • TensorFlow • Caffe

# COURSEWORK

### **GRADUATE**

Advanced Machine Learning Modern Probability Theory & Stochastic Processes Bio-Data Programming

#### UNDERGRADUATE

Numerical Methods Complex Analysis Differential Geometry and Topology Mathematical Analysis Linear Algebra Probability Theory Math. Statistics & Random Processes Discrete Mathematics

## **PUBLICATIONS**

#### **CONFERENCE ARTICLES**

- V. Nekrasov, H. Chen, C. Shen, and I. Reid. Architecture Search of Dynamic Cells for Semantic Video Segmentation, In WACV, 2020.
- V. Nekrasov, C. Shen, and I. Reid. Template-Based Automatic Search of Compact Semantic Segmentation Architectures, In WACV, 2020.
- V. Nekrasov, H. Chen, C. Shen, and I. Reid. Fast Neural Architecture Search of Compact Semantic Segmentation Models via Aux. Cells, In CVPR, 2019.
- V. Nekrasov et al. Real-Time Joint Semantic Segmentation and Depth Estimation Using Asymmetric Annotations, In ICRA, 2019.
- V. Nekrasov, C. Shen, and I. Reid. Light-Weight RefineNet for Real-Time Semantic Segmentation. In BMVC, 2018.
- V. Nekrasov, J. Ju, and J. Choi. Global Deconvolutional Networks for Semantic Segmentation. In BMVC, 2016.

### **PRE-PRINTS**

• V. Nekrasov . C. Shen, and I. Reid. Diagnostics in Semantic Segmentation. arXiv:1809.10328.

## **EXPERIENCE**

### **AUTONOMY TEAM, SKYDIO** | Deep Learning Research Engineer

Aug, 2020 - now | Remote

- Deep Learning team lead
- Improving and extending Skydio Autonomy Engine

### **AUTONOMY TEAM, SKYDIO** | Computer Vision Research Intern

Jun, 2019 - Nov, 2019 | Redwood City, CA, USA

Worked on the obstacle avoidance system of an autonomous flying robot, Skydio 2

### AO "BINBANK DIGITAL" | MAIN SPECIALIST / DATA SCIENTIST

Apr, 2017 - Jul, 2017 | Moscow, Russia

• Built predictive machine learning models quantifying clients' responses to various promotions and campaigns

### UNIST, ARTIFICIAL INTELLIGENCE LAB | RESEARCHER

Aug, 2015 - Feb, 2016 | Ulsan, South Korea

• Built an improved deconvolutional block for semantic image segmentation

### **SVYAZNOY** | DATA SCIENTIST

Dec, 2014 - Jul, 2015 | Moscow, Russia

 Built a ranking machine learning model to provide personalised recommendations in an on-line store

# WFB DFMOS

Dense per-pixel tasks in your browser via Javascript https://drsleep.github.io/demos/	2019
Diagnostics in Semantic Segmentation - supplementary https://cv-conf.shinyapps.io/diag-sem-segm/	2018
NCI-60 Interactive Application	2016