# Vladimir Nekrasov

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# EDUCATION

### UNIVERSITY OF ADELAIDE

PH.D. IN COMPUTER SCIENCE Aug, 2017 - curr. | Adelaide, Australia

Per-Pixel Dense Classification Tasks

#### **UNIST**

PH.D. IN COMPUTER SCIENCE Mar, 2016 - Feb, 2017 (permanent voluntary leave) | Ulsan, South Korea

GPA: 4.3 / 4.0

Semantic Image Segmentation, Text-to-Image Generation

#### MOSCOW STATE UNIVERSITY

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

Indoor Navigation, Stability & Control Theory

# LINKS

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

# SKILLS

### **PROGRAMMING**

Over 5000 lines: Python • R Over 1000 lines:

C • C++ • Matlab • Scala • Latex

#### **DEEP LEARNING**

TensorFlow • PyTorch • Caffe • MXNet

# COURSEWORK

### **GRADUATE**

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

#### **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, To appear in WACV, 2020.
- V. Nekrasov, C. Shen, and I. Reid. Template-Based Automatic Search of Compact Semantic Segmentation Architectures, To appear in WACV, 2020.
- V. Nekrasov, H. Chen, C. Shen, and I. Reid. Fast Neural Architecture Search of Compact Semantic Segmentation Models via Aux. Cells, CVPR, 2019.
- V. Nekrasov et al. Real-Time Joint Semantic Segmentation and Depth Estimation Using Asymmetric Annotations, ICRA, 2019.
- V. Nekrasov , C. Shen, and I. Reid. Light-Weight RefineNet for Real-Time Semantic Segmentation. BMVC , 2018.
- V. Nekrasov , J. Ju, and J. Choi. Global Deconvolutional Networks for Semantic Segmentation. BMVC , 2016.
- V. Nekrasov . Indoor Navigation Techniques. (In Russian). Lomonosov International Conference , Moscow, 2013.

#### **PRE-PRINTS**

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

# **EXPERIENCE**

### **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

## HPC SUPPORT, THE UNIVERSITY OF ADELAIDE | CADET

Nov, 2017 - Dec, 2017 | Adelaide, Australia

- Parsed and built dependency trees for existing software
- Created new users accounts, installed HPC software on request

## AO "BINBANK DIGITAL" | Main Specialist / Data Scientist

Apr, 2017 – Jul, 2017 | Moscow, Russia

• Built a predictive machine learning model able to quantify clients' responses to different promotions and campaigns

## UNIST, ARTIFICIAL INTELLIGENCE LAB | RESEARCHER

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

- Proposed an improved deconvolutional block for semantic image segmentation
- Worked on and studied theoretical foundations of deep learning (polynomial learnability, the effect of depth)

## **SVYAZNOY** | DATA SCIENTIST

Dec, 2014 - Jul, 2015 | Moscow, Russia

- Optimised personalised recommendations for e-commerce site
- Built an items ranking algorithm based on the NDCG metric
- Built a classifier for personalisation of advertisement campaigns

# WEB DEMOS

NCI-60 Interactive Application

https://drsleep.shinyapps.io/bio\_data/

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

2016