Vladimir Nekrasov

A deep learning and computer vision expert focused on simplifying existing end-to-end pipelines in order to create practical solutions and applications. Extensive experience building real-time deep learning networks optimised for embedded devices.

WORK EXPERIENCE (LAST 4)

HARRISON.AI | Sr. Machine Learning Engineer — Remote, AU | Apr, 2024 - present

- End-to-end health tech solutions on multi-modal data

Tools used: Python • Transformers • Gradio • PyTorch

AIML, CAR | Grant-Funded Researcher (B) — Adelaide, AU | Nov, 2023 - Apr, 2024

- Practical solutions for multi-modal generative AI (text, music, image)

Tools used: Python • Transformers • Diffusers • Gradio • MIDITok • LeoCAD

NEARMAP | Sr. Data Scientist, AI Team — Remote, AU | Jun, 2022 - Apr, 2023

- Built high-quality, scalable and platform-agnostic temporal deep learning model on aerial imagery

Tools used: Python • PyTorch Lightning • Hydra • WandB • Streamlit • QGIS • S3 • Folium • torchscript

SKYDIO | Sr. Deep Learning Research Engineer, Autonomy Team — Remote, AU | Aug, 2020 - Mar, 2022

- Built and established easy to use end-to-end reproducible deep learning pipelines and processes
- Led and managed a team of 5 deep learning engineers

Tools used: Python • C++ • CUDA • PyTorch • WandB • Streamlit • TensorRT • Slurm • ONNX • torchscript

EDUCATION

Ph.D. in Computer Science — Adelaide, Australia | Aug, 2017 - Nov, 2020

The University of Adelaide, School of Computer Science

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

Dean's Commendation for Thesis Excellence

Specialist D. in Mechanics — Moscow, Russia | Sep, 2010 - Jun, 2015

Lomonosov Moscow State University, Faculty of Mathematics and Mechanics

Majors: Indoor Navigation, Stability & Control Theory

SELECTED PUBLICATIONS

CVPR — Long Beach, USA, 2019

Fast Neural Architecture Search of Compact Semantic Segmentation Models via Aux. Cells

V. Nekrasov, H. Chen, C. Shen, and I. Reid — https://github.com/DrSleep/nas-segm-pytorch

ICRA — Montreal, Canada, 2019

Real-Time Joint Semantic Segmentation and Depth Estimation Using Asymmetric Annotations

V. Nekrasov et al. — https://github.com/DrSleep/multi-task-refinenet

BMVC — Newcastle-upon-Tyne, UK, 2018

Light-Weight RefineNet for Real-Time Semantic Segmentation

V. Nekrasov, C. Shen, and I. Reid — https://github.com/DrSleep/light-weight-refinenet