Egor Burkov

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GitHub, *Google Scholar*, *LinkedIn*

Profile

- **I am** a computer vision researcher with a very diverse exposure (design, entrepreneurship, teaching etc).
- **I am looking for** a job in AI that would really require soft and/or multidisciplinary skills:
  AI consultant, cross-functional teams manager, head of AI, lead engineer... or something less standard!

Work

2023 **Meta Reality Labs – Zürich**, *Research Scientist Intern*
Researching ways to make diffusion models for image generation work with less steps (= faster).

2018–21 **Samsung AI Center – Moscow**, *Research Scientist*
Researching human pose in a broad sense for AR/VR telepresence.
Most representative project: latent pose vectors for head reenactment.

2015–17 **VisionLabs**, *Research Engineer*
Optimizing computer vision algorithms in C and CUDA. Improving and compressing neural nets.
Example projects: real-time facial keypoint detection on smartphones; OpenCV bindings for Torch.

Education

2018–24 **PhD in Computer Science**, *Skoltech*
Thesis: *Learning from Data for Human Modeling and Tracking*.

2016–18 **MSc in Computer Science**, *Skoltech*, with distinction
Thesis: *Deep Neural Networks with Box Convolutions*, accepted to NeurIPS.

2012–16 **BSc in Computer Science**, *HSE University*
Thesis: *ConvNet-based Human Segmentation Using Background Subtraction Map*.

Selected Projects

- **Multi-NeuS: 3D Head Portraits from Single Image with Neural Implicit Functions**. IEEE Access 11, 2023. E. Burkov et al.
- **Neural Head Reenactment with Latent Pose Descriptors**. CVPR 2020. E. Burkov et al.
- **Learnable Triangulation of Human Pose**. ICCV 2019. K. Iskakov et al.
- **Deep Neural Networks with Box Convolutions**. NeurIPS 2018. E. Burkov, V. Lempitsky
- **Textured Neural Avatars**. CVPR 2019. A. Shysheya et al.

Everything Else

- Engineering passions: parallel / high-performance computing, embedded systems.
- AI research passion: self-supervised learning.

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