UnMasked Image inpainting

Eršek Martin (xersek00) Hanzel Svätopluk (xhanze 10)

Brno University of Technology, Faculty of Information Technology



UnMasked



 UnMasked is a project aiming to remove face masks from peoples' faces using image inpainting

Solution



- PyTorch¹
- PyTorch Lightning²
- SN-PatchGAN (1)
 - Gated convolutions
- CelebA-HQ dataset
 - 30k images
- on-the-fly masking using MaskTheFace³ (2)

https://pytorch.org/

²https://www.pytorchlightning.ai/

https://github.com/ageelanwar/MaskTheFace/





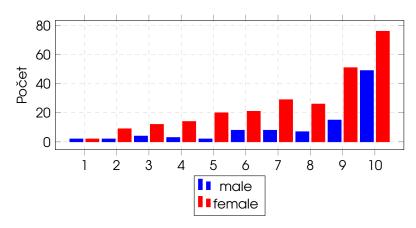
Obr.: Network results from validation dataset. Left to right: input, coarse, refined, output, ground truth





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Obr.: Ohodnotenie vierohodnosti obrázka za pomoci užívateľského výskumu. X-ová os značí to ako veľmi realisticky vyzeral obrázok pre užívateľov. 1 - nerealistický, generovaný počítačom; 10 - originálna neupravovaná fotka

Conclusion



content...

Thank you for your attention!

References



- Yu, J.; Lin, Z.; Yang, J.; aj. Free-Form Image Inpainting with Gated Convolution arXiv preprint arXiv:1806.03589 2018.

Anwar, A.; Raychowdhury, A. Masked Face Recognition for Secure Authentication 2020 2008, 11104.