Enhancing Low Resolution Faces for Identification Using MPSRGAN

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Abstract—Upscaling images using traditonal methods are not ideal, because of no added detail they come with pixelation even at low upscaling factors. Convolutional neural networks can be used to analyze low resolution images of faces and generate possible high resolution images for identification purposes. We created an algorithm based on SRGAN(IDE HIVATKOZAS) and achived better results than interpolation based algorithms.

I. Introduction

Enhancement of image resolution comes with higher number of pixels but no added detail. Traditional image upscaling is done by an interpolation algorithm, for example nearest-neighbor or bicubic interpolation. They try to guess the values of new pixels based on the originals, but even at smaller upscaling factors create jaggedness and reduce contrast. To solve these problems, and achive higher scaling factors we use deep convolutional neural networks, which can learn and add missing information.

A. Related work

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II. CONCLUSION

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REFERENCES

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