Once you have selected the paper, you have to write a short 800 word review that:

* Gives a summary of the application domain of the paper

‘In this paper, we propose a one-level non-progressive neural network for low up-sampling multi-contrast superresolution and a two-level progressive network for high up-samplingmulti-contrast super-resolution.’

The main contribution of this paper:  
1) ‘the two-level progressive neural network based on the Wasserstein generative adversarial network with gradient penalty (WGAN-GP) architecture that can achieve excellent MCSR results in the case of a high up-sampling factor;’

2) ‘The finding that combining multi-contrast information in a high-level feature space leads to a significantly improved results over the combination in the low level pixel space’

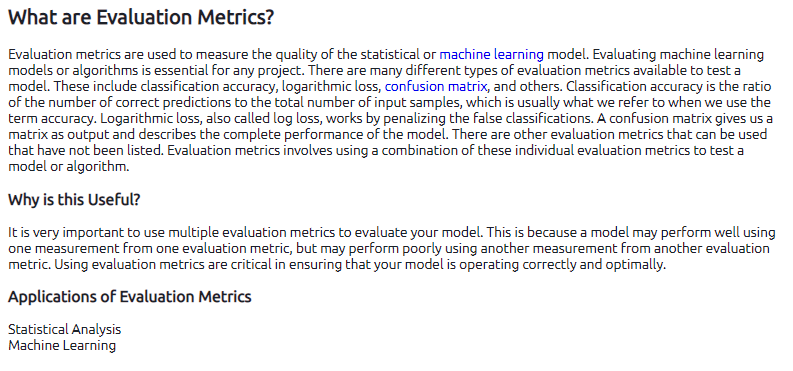
3) ‘A composite loss function including mean-squared-error (MSE), perceptual loss, and texture matching loss to ensure that generated images can recover texture details (due to the perceptual and texture matching losses) and are faithful to the ground truth (due to MSE).’

* Gives a summary of the used (Machine Learning) methodology and evaluation metrics

‘The proposed networks integrate multi-contrast information in a high level feature space and optimize the imaging performance by minimizing a composite loss function, which includes mean-squared-error, adversarial loss, perceptual loss, and textural loss.’

‘The structural similarity (SSIM), peak signal-to-noise ratio (PSNR) [37] and information fidelity criterion (IFC) [43] **metrics** are used to evaluate the image quality of MCSR results.’

* Discusses the strong and weak points of the methodology and evaluation metrics



* Suggests alternative methodology, evaluation metrics and ideas for improvement