Modifikasi Citra Ekspresi Wajah Netral menjadi Ekspresi Wajah Tersenyum menggunakan *Generative Adversarial Network*

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Abstract
In this study, we discuss whether we can change the facial expressions in the image automatically. In this research, we use Generative Adversarial Network to change the image of neutral facial expressions to smiling facial expressions and the architecture that is used is *CycleGAN*. The purpose of this study is to produce a smile face expression image from a neutral face expression image that looks realistic. The dataset used comes from the FEI Face Database of 400 images with a resolution of 260x460. The results of this study produce a value of 6.5 for a scale of 0 to 10 which was assessed by a survey of 63 respondents. This research also produce Fréchet Inception Distance(FID) value of 62.18.

Keywords: CycleGAN, Expression, Generative Adversarial Network, Image, Face.