

**GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR**  
**INSTRUMENTATION & CONTROL ENGINEERING DEPT.**

**REPORT OF Expert talk on “Generative Adversarial Networks for Speech Technology Applications”**

Instrumentation and Control Engineering Department, GEC, Gandhinagar had organized an Expert talk on “Generative Adversarial Networks for Speech Technology Applications” by a Distinguished Faculty from DAIICT- Prof. Hemant Patil on 30<sup>th</sup> July, 2018. He delivered an Expert talk as ASPIPA (Asia Pacific Signal and Information Processing Association) distinguished lecture series. Many student’s and faculties participated from Instrumentation and Control, Biomedical and Computer Engineering were benefited from this expert talk.

The expert talk was focused on Development of Speech Enhancement (SE) algorithms for suppression of additive noise present in the noisy speech. The Time-Frequency (T-F) masking-based approaches employing supervised learning algorithms (such as, Deep Neural Network (DNN) , Generative Adversarial Networks (GANs) for optimization through a pair of generator and discriminator networks were briefly discussed. Finally, the talk concluded by showing the learned voice samples on applying GAN-based training to the Voice Conversion (VC) task and other future research directions in GAN-based speech technology applications.

