

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202441008833 A

(19) INDIA

(22) Date of filing of Application :09/02/2024

(43) Publication Date : 08/03/2024

(54) Title of the invention : GENERATIVE ADVERSARIAL NETWORKS (GAN) ASSISTED MATHEMATICAL FRAMEWORK FOR ARTISTIC STYLE TRANSFER FROM TEXT

(51) International classification :G06N0003080000, G06N0003040000, G06T0011000000, G06N0020000000, G06T0003000000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :
1)RVR & JC COLLEGE OF ENGINEERING
 Address of Applicant :RVR & JC COLLEGE OF ENGINEERING CHANDRAMOULIPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 Guntur ----- --

Name of Applicant : NA
Address of Applicant : NA

(72)Name of Inventor :
1)Dr. K.S. Balamurugan
 Address of Applicant :DEPARTMENT OF MATHEMATICS & HUMANITIES RVR & JC COLLEGE OF ENGINEERING CHANDRAMOULIPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 Guntur -----
2)Dr. M. Sudhakar
 Address of Applicant :DEPARTMENT OF MATHEMATICS & HUMANITIES RVR & JC COLLEGE OF ENGINEERING CHANDRAMOULIPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 Guntur -----
3)K. J. L. Narayana
 Address of Applicant :DEPARTMENT OF MATHEMATICS & HUMANITIES RVR & JC COLLEGE OF ENGINEERING CHANDRAMOULIPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 Guntur -----
4)Dr. A.V. Rama Krishna
 Address of Applicant :DEPARTMENT OF MATHEMATICS & HUMANITIES RVR & JC COLLEGE OF ENGINEERING CHANDRAMOULIPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 Guntur -----

(57) Abstract :
 GENERATIVE ADVERSARIAL NETWORKS (GAN) ASSISTED MATHEMATICAL FRAMEWORK FOR ARTISTIC STYLE TRANSFER FROM TEXT ABSTRACT This invention presents a novel approach to artistic style transfer from textual descriptions, leveraging a Generative Adversarial Network (GAN) assisted mathematical framework. The system receives textual input describing an artistic style, utilizing a GAN-based model to generate a mathematical representation of the specified style. Through this process, unique style features are extracted, forming a distinctive artistic representation. These extracted features are subsequently applied to input images, effecting a transformation into the defined artistic style. The GAN model is trained using a dataset of text-style pairs, enabling it to learn and accurately generate diverse artistic styles. The proposed framework contributes to the field of artistic style transfer by offering a dynamic and adaptable solution that bridges the semantic gap between textual descriptions and visually appealing stylized images.

No. of Pages : 16 No. of Claims : 8