CV 구현 스터디

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스터디원 소개 및 만남 인증



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목차

- **1.** 스터디 소개
- 2. 진행 방식
- 3. 목표
- 4. 선정된 논문 소개

스터디 소개

computer vision 분야의 논문을 읽고 직접 구현해보는 스터디

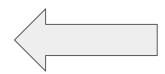
Browse SoTA > Computer Vision

Computer Vision

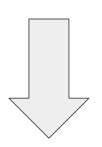
2690 benchmarks • 958 tasks • 1774 datasets • 23567 papers with code

진행 방식

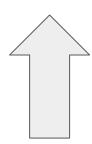
질의응답한 후 어떻게 구현할 것인지 토의



각자 논문 읽고 이해해오기



시간: 일요일 오후 **4**시. 비대면으로 진행



각자 구현



회고 및 정리, 다음 논문 정하기



목표

1. 논문의 수식에 익숙해지기

$$\frac{\partial E_l}{\partial F_{ij}^l} = \begin{cases} \frac{1}{N_l^2 M_l^2} \left((F^l)^{\mathrm{T}} \left(G^l - A^l \right) \right)_{ji} & \text{if } F_{ij}^l > 0\\ 0 & \text{if } F_{ij}^l < 0 \end{cases}$$
(6)

2. computer vision 관련 지식 함양

선정된 논문 소개

<u>Image Style Transfer Using Convolutional Neural Networks</u> (cv-foundation.org)













Rendering the semantic content of an image in different styles is a difficult image processing task. Arguably, a major limiting factor for previous approaches has been the lack of image representations that explicitly represent semantic information and, thus, allow to separate image content from style. Here we use image representations derived from Convolutional Neural Networks optimised for object recognition, which make high level image information explicit. We introduce A Neural Algorithm of Artistic Style that can separate and recombine the image content and style of natural images. The algorithm allows us to produce new images of high perceptual quality that combine the content of an arbitrary photograph with the appearance of numerous wellknown artworks. Our results provide new insights into the deep image representations learned by Convolutional Neural Networks and demonstrate their potential for high level image synthesis and manipulation.