Comixify: Turning Videos into Comics

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Abstract

In this talk, we would like to tell you about Comixify$^{®}$ – AI-powered tool that turns videos into comics. It is a result of a research project run at Warsaw University of Technology with a group of students. Since its release in December 2018 Comixify became a massive success with over 200000 visits on the website and over 60000 generated comics. The algorithm behind Comixify consists of two parts: first we select representative and visually pleasant frames from a video using a combination of reinforcement learning and a convolutional neural network approach, based on our previous research on popularity estimation in social media. Afterwards, we convert the style of the frames using our own ComixGAN architecture based on generative adversarial networks. In this talk, using Comixify as a case study, we will give an introduction to how machine learning can improve understanding of narratives and to our research plans to incorporate more multimodal cues into our engine.

Short Bio

Tomasz Trzcinski is an assistant professor at Warsaw University of Technology, Chief Scientist at Tooploox and a co-founder of Comixify, a technology startup focused on using machine learning algorithms for video editing. He obtained his PhD in Computer Vision at EPFL, was a Visiting Scholar at Stanford University and Nanyang Technological University. He is an Associate Editor of IEEE Access and frequently serves as a reviewer in major computer vision conferences (CVPR, ICCV, ECCV, ACCV, BMVC, ICML, MICCAI) and international journals (TPAMI, IJCV, CVIU, TIP, TMM). His professional appointments include work with Google in 2013, Qualcomm Corporate R&D in 2012 and Telefónica R&D in 2010.

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