Future of Artificial Intelligence and Deep Learning tools for VFX

Extended Abstract

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ABSTRACT

This panel discusses trends and prospects for using AI tools in the VFX pipeline. Panel experts will talk about the current AI tools that work in the industry, give answers to questions and their vision of their technology development.

CCS CONCEPTS

• **Computing methodologies** → **Artificial intelligence**; **Machine learning**; **Computer graphics**; *Computer vision*; • **Computer systems organization** → *Neural networks*; • **Software and its engineering** → *Interactive games*; • **Human-centered computing** → Mixed / augmented reality; Virtual reality; • **Theory of computation** → Machine learning theory;

KEYWORDS

Artificial intelligence, Visual Effects, Games, Machine learning, Deep learning, VFX tools, Computer graphics, future, panel

1 PANEL TOPICS

This panel discusses trends and prospects for using AI tools in the VFX pipeline. Machine learning can play and plays an important role in an increasing number of applications in the VFX industry. New examples of using Deep Learning for video processing, 3D and AR/VR are so innovative that no one can ignore it.
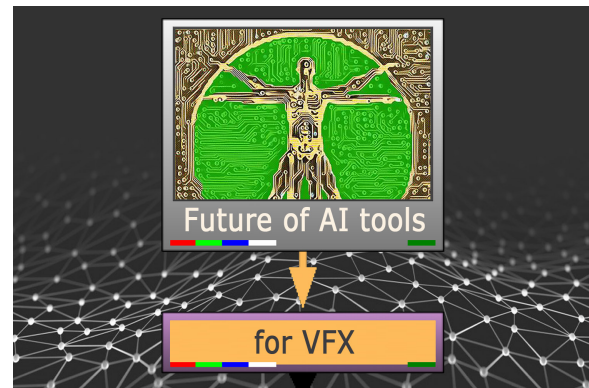
But there is a lot of hype and speculation around AI. Therefore, it is important to receive the first-hand information, from professionals. Speakers, invited to the panel, are experts in machine learning in the VFX. Experts will talk about the current situation with AI tools in the industry and give their vision for their development. Topics that panellists can touch, though but not limited by the following:

- Areas of successful usage AI in VFX
- Cloud technology and its usage for Machine Learning
- Simplifying technical problems of integrating AI in VFX studio pipeline
- Machine Learning in Visual Effects in 2018 and beyond
- What are the technology demands, and what is really available now?
- Collaboration with scientists
- Challenges in development Machine Learning tools

The issue of the influence of machine learning tools on the work of artists will also be considered. It is questionable whether this progress should make people worry about the future of their jobs. Objective opinions of experts will help us understand this problem, remove doubts and outline the optimal professional strategy of usage Machine Learning tools.

2 PANELISTS

This panel brings together VFX engineers and scientists in order to get the answers to the most interesting AI technology questions in Visual Effects.

The panelists were selected on the basis of their practical experience in the subject. We also tried to cover different work areas and different regions of the world. The list of the speakers covers the VFX studios, the software companies and the academic environment. This approach can be the basis for a multifaceted and objective discussion

We hope that our panel will cause considerable interest and will be successful. We also think that holding such a panel on SIGGRSPH 2018 will have a significant positive effect on the development of innovative technologies in VFX

3 PROFESSIONAL COMMUNITY COMMUNICATION

The distinguishing feature of this panel is to make the audience participate in preparation of the questions for the discussion, prior to the conference. The discussion will take place in the LinkedIn group "Deep Learning and Artificial Intelligence for the Visual Effects industry" , a professional community with more than 1300 members. The audience will have the opportunity to ask questions at the site http://www.aivfx.org/ before the conference starts. Our experts will answer the most important of them during the panel.