

Review of Vadim Petrov's Master's Thesis "Advanced Tool for Production of Visual Effects for Live Performances"

Vadim Petrov focused on the design and implementation of an image synthesis tool for live audio-visual performances in the context of electronic dance music.

The tool synthesizes a visual output using a set of user-specified video sequences and visual filters, based on a real-time user's input provided by various channels, including MIDI. This enables to synchronize the visual synthesis with the rhythmic patterns of the music, for an enhanced experience of the spectators. The technical solution is adequate.

The text of the thesis clearly outlines the state of art, the author's previous work, description of the technical solution, as well as the evaluation.

The tool has been thoroughly evaluated and tested:

- Its performance was measured in terms of data initialization as well as latency.
- The system has been successfully evaluated in a usability testing.
- Three active electronic music performers (DJs) submitted their peer reviews.
- The system has been utilized in a public performance in Cross Club (Prague) in January 2020.

Vadim Petrov delivered a high-quality work which can be used in practical applications. It is my pleasure to recommend the thesis for defense with the suggested grade "A – vyborne".

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