ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

*Distributed
Computing*

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Audio Upmixing

Multi-channel audio formats (such as stereo, binaural, or 5.1) have become increasingly ubiquitous. The increasing demand for immersive sound experiences has spurred interest in audio upmixing, methods that transform standard mono-channel recordings into surround sound formats. Audio upmixing not only enhances the listening experience in home theaters and virtual reality applications but also provides opportunities in music production, broadcasting, and gaming. In this thesis we will investigate advanced audio upmixing techniques using deep learning, aiming to create a model that can convert lower-channel audio into high-quality multi-channel outputs.

Requirements: Strong Python programming skills. Preferably with interests in sound processing and writing up a conference paper.

Weekly meetings will be scheduled to address questions, discuss progress, and brainstorm future ideas.

Contact

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