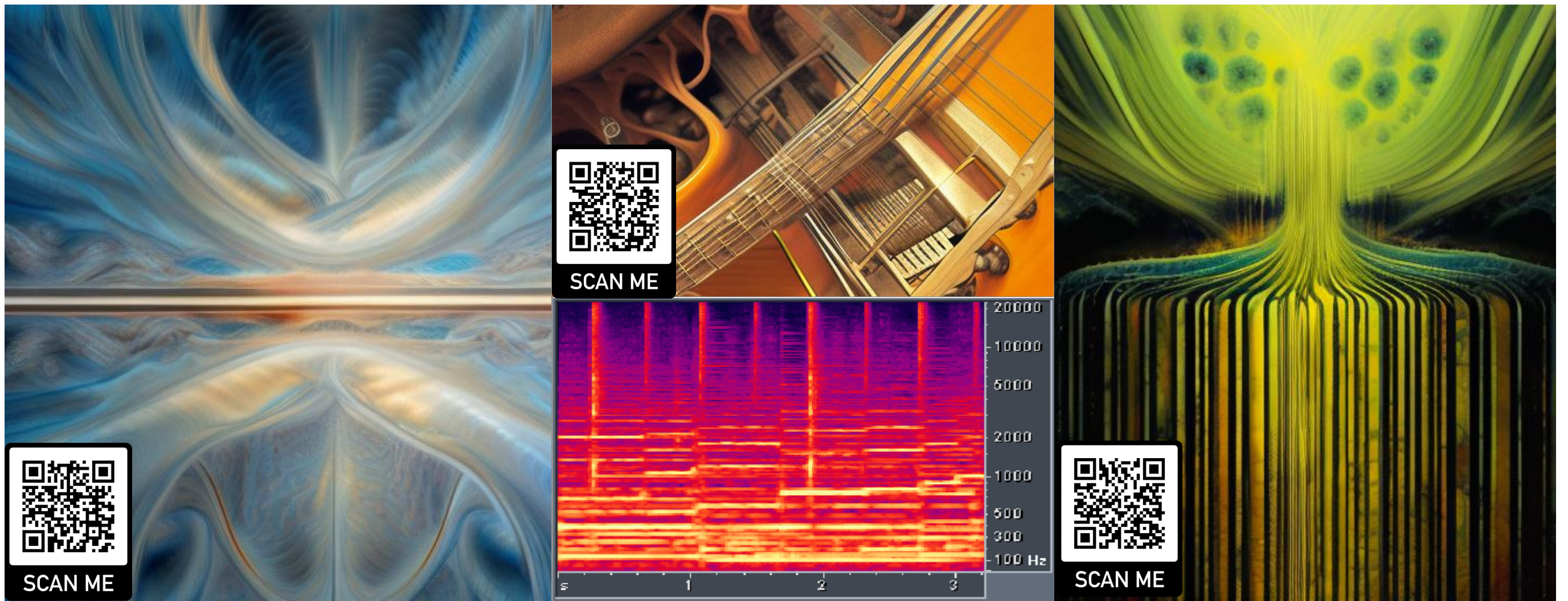


Music Visualization with Deep Learning

creating Static Abstract Images using Generative Adversarial Neural Networks

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Project Objectives:

The project explores the potential of deep learning technologies such as Stable Diffusion XL in generating static, abstract visualizations of music with a focus on representing complex musical concepts such as mode, timbre, and symbolism. By developing a novel approach that jointly integrates music and natural language processing, the project seeks to produce visually appealing and meaningful representations of music that encapsulate a song's emotional essence, thereby expanding the applications for static visualizations across different industries.

Software Pipeline:

1. MuLAN and AST implementation
2. LibROSA for music mode extraction
3. Mood Label Classification Network
4. Stable Diffusion XL (SDXL) to generate visualizations.

SDXL Workflow:

