

# Deep Learning in Music Visualisation

## using Generative Adversarial Networks (GANs)

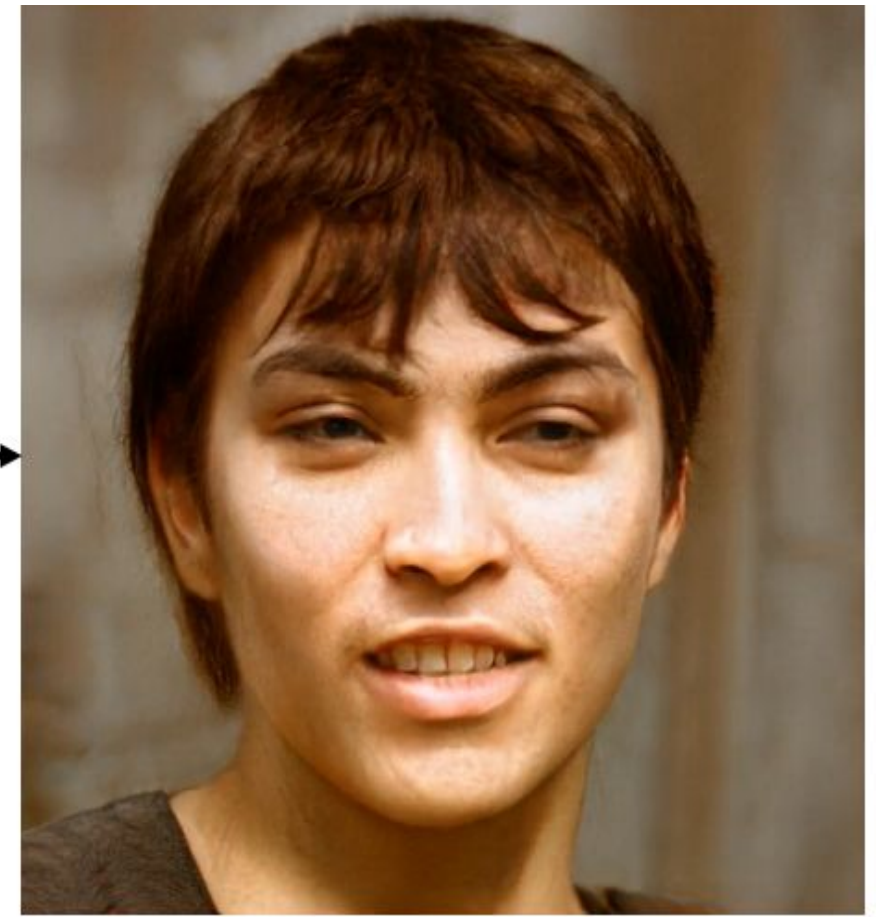
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Instrumental Segment



Female face generated with mouth open  
while female voice plays



Male face generated with mouth open  
when male voice plays

### Project Objectives:

This project documents the research and development of a Music Visualisation tool that leverages deep learning via the use of Generative Adversarial Networks (GANs). The tool will utilize latent space explorations to create visualisations that can react to each and every element of the song (drums, vocals, bass etc.) The end goal is to create visualisations that appear unique and distinct in its style, as well as having some aesthetic value for general use by the public.

#### List of Visualisations & Associated Latent Vectors

Visualisation 1: Way Back Into Love - mouth\_open ratio

Visualisation 2: Way Back Into Love - male\_to\_female vocals

Visualisation 3: Creep - distortion