

Eindpresentatie CPP

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Prioriteit verschuiving

C++ Convolution

Jochem en Teun

Applications

- Research
 - Fast convolution vs direct convolution
 - Audible difference?
- Microphone reverb
 - Connecting the input stream to the convolution
- File playback
 - Import an audio file (mp3/wav) in a buffer and play it using convolution

Topics

- Convolution DSP
- File input
- Audio IO
- (Debugging)

Convolution DSP

- Direct convolution
- Fast convolution (FFT)

File input

- (Audio) files to buffers
- Determining compression type, decode to buffer
 - wav, mp3, etc.
- UI-listing

Audio IO

- Jack input en output
- Android?

Debugging

- Breakpoint
- Logging

Planning

- Week 1: Pitch 1
- Week 2: Pitch 2
- Week 3: Research
- Week 4: Writing convolution library
- Week 5: Writing applications
- Week 6: Writing applications
- Week 7: Presentation

Presentation

- 20 minutes: Explaining research and applications
- 10 minutes: Debugging
- 30 minutes: Working with the applications
 - Try to implement it in your own code

Applications

- Arguments
- File playback
- (Convolution)

Applications

- Demo en verantwoording
- Context en relevantie
- Wat heeft het jullie opgeleverd?

Arguments

- User input
- Makkelijk te implementeren

File playback

- Mp3 lib bad documentation
- Wav decoding
- Rapit prototyping

Convolution

- Research:
 - Direct
 - FFT

Ervaring