Music Recommendation & Exploration Demo

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Demo
System Overview

Client

Parallel Browser

“Radiohead”

“King Tubby”

Server

SEJITS

Parallel Browser

Recommendation Engine

1M songs

Layout Engine

1K clustered songs

sid_1, sid_2

Tesselation
Client Architecture

Safari Web Browser

Parallel JavaScript Libraries

- Render
- Layout
- Parse (JSON)

1K clustered songs
1M songs

viz.ftl

Synthesizer

offline: compile-time
Music Recommendation Stack

- PARDORA
- PyCASP
- ASP
- CUDA / Cilk+
- TBB
- Lithe
- Linux
- Tessellation
- PTX
- x86
- GPGPU
- Multicore
- RISC-V
- RV FPGA
- x86
- Multicore
- OpenCL
- GPGPU
- x86
- JavaScript
Offline Phase

1M songs

Online Phase

SEJITS

Get potential neighbors using Collaborative Filtering

"Radiohead"

Tessellation

Server Architecture

GPU

CPU

FPGA
Music Recommendation Stack

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