

Supercomputers For Audio Research and Development

CEWIT's newsletter on my use of Stony Brook's supercomputing time for audio synthesis and modeling.

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cewit's newsletter ran a short piece on what i was doing with the university's supercomputing allocation: audio synthesis and modeling at a scale that does not fit on a desktop.

having that much compute changes which questions you can ask. a lot of audio engineering is choosing a filter design or a basis function on the strength of experience and then tuning it until it sounds right. with a cluster you can search the space instead, evaluating thousands of candidates against a real corpus to find out whether the conventional choice was ever the best one.

the same models apply outside music. forensic audio and medical imaging are both problems of pulling a signal out of noise when you have a decent prior for what the signal should look like.

[read the full article](#), inside the february 2016 newsletter pdf.

https://alexnodeland.com/timeline/160201_hpc-audio-research/