

Sutanu Chatterjee

Audio and Acoustics Portfolio • October 2026

Research Engineer, ITMO University

Doctoral researcher in Physical and Mathematical Sciences

St. Petersburg, Russia • sutanuchatterjee93@gmail.com

+7 952 218 05 28 • +91 973 593 98 89

ronn.cc • ORCID 0000-0002-7888-5764 • [Google Scholar](#) • [ITMO profile](#)

Audio software, signal processing, circuit development, and historical recording restoration.

Circuit derived audio processing



Professional background

Steinberg Media Technologies

January 2017–February 2019 • Third-party developer • Remote

Audio software using the VST SDK, C++ and Ruby.

Avid Technology

2014–2016 • Development Partner • Remote

Audio DSP plug-ins in AAX format for Pro Tools 10 and later.

Weavers Studio Center for the Arts

2014–2018 • Restoration Engineer • Kolkata

Noise-reduction filters and algorithms for historical electrical recordings, including shellac and vinyl.

Alternoid Electronics

2014–present • Founder and Engineer

Audio electronics and DSP tools alongside power-supply engineering.

Education

Satyajit Ray Film and Television Institute, 2016–2018. Scholarship-supported studies in sound recording and design; programme not completed.

Methods

Convolution and impulse-response modelling; FIR/IIR filters; digital equalisation and reverberation; circuit simulation; amplifier and transducer electronics; audio DAWs and FlowStone.

Selected audio projects

Sutanu Chatterjee • Audio and Acoustics Portfolio



PROJECT 01

Little Mojo

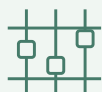
Digital guitar amplifier derived from circuit simulations, with a DSP engine modelling circuit behaviour over the audio band. Speaker-cabinet responses and additional filtering shape the output.



PROJECT 02

AP 1A

Passive equaliser model based on a valve and LC circuit. Impulse-response processing captures aspects of its tonal behaviour.



PROJECT 03

Sheen

Psychoacoustic equalisation using restrained upper-mid and high-frequency shelving, with gentle reverberation to add brightness.



PROJECT 04

Eerieverb 1.0

Convolution using the recorded impulse response of a church, combined with digital reverberation algorithms.



PROJECT 05

Dream and Space

Reverberation built from cascading delays, dedicated filters, and pre-delay, with a variable input bandpass filter for ambient and post-rock applications.



PROJECT 06

Instrument electronics

Piezo transducers and a dedicated amplifier; a compact guitar compressor; and a switch-based booster with treble and bass options.