



Simon Durbridge

Embedded Audio
Research & Development



Linkedin



<https://sedurcode.com>



Researchgate



GitHub



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Awards

- AES Student Research Award 2016,
- Best Presentation UoY EE PhD Conference 2019

Skill

Software Development



Audio Signal Processing



Independent Research



Software Optimisation



Algorithm Development



C++ (Sharc flavour 11ish)



Modern C++ (17++)



High Level Languages (Python, Matlab)



Machine Learning



Linux Kernel Driver Development



(*)[The skill scale is a relative representation of my confidence in these areas from 'Chat-GPT assisted' to 'Boris Grishenko'.]

About Me

I am a specialist signal processing software engineer, a postgraduate research student, a keen climber and a closet musician. When I'm not working on low level optimisations or high level abstractions, I am exploring the natural and technological world.

Education

Ending May 2023	PhD candidate in Electronic Engineering <i>Physiological Measures in Immersive Laboratory Based Soundscape Evaluation</i>	University of York
2015-2017	M.Sc. Audio Engineering <i>Efficient Acoustic Modelling of Large Spaces using Time Domain Numerical Methods</i>	University of Derby
2011-2015	B.Sc. Sound, Light & Live Event Technology <i>The Effects of Distortion on Perceived Loudness in Live Sound</i>	University of Derby
2006-2008	BTEC Music Performance Specializing in guitar performance	Academy of Contemporary Music

Experience

since 2019	Freelance	Specialist Digital Signal Processing Consultant
		<ul style="list-style-type: none">• Providing audio signal processing consultancy to several clients• Primary Client: Neural DSP Technologies• Sharc/ARM/x86 programming, C++, JUCE, Assembler, Python, Bash, Qt, Linux• Algorithm porting, implementation & optimisation• Multi-SoC system programming• Working across international remote teams
2017-2019	Bowers & Wilkins	DSP Engineer
		<ul style="list-style-type: none">• Develop and maintain bespoke audio processing algorithms and other supplementary programs• ADI Sigma DSP (Assembler), Matlab, Python, Bash• Work with international teams across the organisation• Responsible for performing research and analysis of the digital audio signal path, working to steer decisions based on signal integrity and quality• Tasked with developing, prototyping and exploring the future of audio signal processing platforms and processes
2015-2017	Amina Technologies	Development Engineer
		<ul style="list-style-type: none">• Developed product manufacturing automation• Improved product testing processes• Collaborated on new products
2009-2017	Freelance	Audio Engineer
		<ul style="list-style-type: none">• Live event production, sound engineering, lighting• Building temporary demountable structures and rigging• Equipment organisation, truck loading, testing• Van driving• High pressure time critical problem solving• Client liaison, budgeting and event specification

Interests

Music Production, Embedded Systems, Human Perception, Physics, Video Games Programming, Rock Climbing, DIY Technology, 3D Printing, Music Technology.