

David H. Benson

Full-Stack Software Engineer



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drdb



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EXPERIENCE

MCGILL UNIVERSITY | RESEARCH ASSISTANT (SOFTWARE DEVELOPER)

2013 – Present | Montreal, QC

- Developed web applications (Javascript/Ruby on Rails), audio effect plugins (C++/JUCE), and other scripts and software tools (R,Max/MSP,MATLAB) to support research activities in the Sound Recording Area at the Schulich School of Music
- Supervised a small team of metadata specialists and junior programmers
- Co-authored papers for international conferences, contributing expertise in statistics and signal processing

WEBTET.NET | FULL STACK SOFTWARE ENGINEER

2011 – Present

- Developed a web application (Javascript/Web Audio API/Ruby on Rails/Heroku) to teach critical listening skills to sound engineers
- Collaborated with leading pedagogues from across North America
- Maintained near constant uptime for over a decade as the webtet.net became the most popular site of its kind, serving thousands of students each month

SKILLS

Proficient Javascript • Web Audio API • Ruby on Rails • HTML • CSS • MATLAB • Heroku • R

Familiar C • C++ • Java • Python • JUCE • SQL • AWS • node.js • Shell Script

EDUCATION

PHD IN SOUND RECORDING | MCGILL UNIVERSITY 2022

- Researched intuitive user interfaces for digital audio effects
- Coursework included music information retrieval, statistical learning, and computer graphics

MA IN MUSIC TECHNOLOGY | MCGILL UNIVERSITY 2007

- Researched headphone-based spatial audio
- Coursework included psychoacoustics and digital signal processing

B.MUS IN MUSIC TECHNOLOGY & VOICE PERFORMANCE | MCGILL UNIVERSITY 2004

- Coursework included object oriented programming, data structures & algorithms, and other computer science fundamentals