

# David H. Benson

Full-Stack Software Engineer



davebenson.ca



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** • Java • Python • C++ • C • 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

- GPA 3.8/4