





David H. Benson

Full Stack Software Engineer

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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++/JUICE), 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 (SOLO)

2011 – Present

- Developed a web application to teach critical listening skills to sound engineers (Javascript/Web Audio API/Ruby on Rails/Heroku).
- Maintained near constant uptime for over a decade as webtet.net grew to serve thousands of students each month and became the most popular site of its kind in the world.

MUSICIAN

2001 – Present

- Professional chorister with the Montreal Symphony Orchestra, the Montreal Bach Festival, and many others.
- Backup vocalist for Malajube, Voivod & Deltron 3030. Headlined at the Montreal International Jazz Festival and others.

SKILLS

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

Familiar C++ • C • JUICE • Java • 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

PUBLICATIONS

TEXTBOOKS

- Corey, J., & Benson, D. H. (2016). Audio Production and Critical Listening: Technical Ear Training (2nd ed.). Routledge/Taylor & Francis Group.

MONOGRAPHS

- Benson, D. H. (2022). Toward Perceptual Searching of Room Impulse Response Libraries [Doctoral dissertation].
- Benson, D. H. (2007). Minimum Audible Movement Angles for Discriminating Upward from Downward Trajectories of Smooth Virtual Source Motion Within a Sagittal Plane [Master's Thesis].