David H. **Benson**

Full-Stack Software Developer

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Experience

PETAL | Backend Developer II
July 2023 – Present

- ➔ Contributed features to a prominent API for booking medical appointments in Quebec (Ruby on Rails / Grape / Swagger / Sidekiq / RSpec)
- ➔ Updated frontend code in Petal's appointment-publishing app to accomodate API changes (Typescript / Angular / NgRx / Jest)
- ➔ Led a hackathon project that reduced response times for common requests by 50% (ElasticSearch / Chewy, Python / Pandas)

MCGILL UNIVERSITY | Research Assistant (Software Developer)
Sept 2013 – July 2023 | Montreal, QC

- ➔ Built software tools to support research activities in the Sound Recording Area at the Schulich School of Music (AngularJS / Ruby on Rails / PostgreSQL, C++ / JUCE)
- ➔ Led software development on the Spacebuilder Project, a multi-year effort to catalogue and make searchable a massive collection of room acoustic data [click for details]
- ➔ Supervised a small team of metadata specialists and junior programmers
- ➔ Co-authored papers for international conferences, contributing expertise in statistics, signal processing and data visualization (Matlab, R)

WEBTET.NET | Full-Stack Software Developer
2011 – Present

- ➔ Solo-developed a web application to teach critical listening skills to sound engineers (Javascript / AngularJS / Ruby on Rails / PostgreSQL / Heroku)
- ➔ Maintained near-constant uptime for over a decade as webtet.net became the most popular site of its kind, serving thousands of students each month
- ➔ Collaborated with leading pedagogues from across North America
- ➔ Minimized code regressions via an extensive test suite (Cucumber / Capybara)

Skills

Expert
Ruby on Rails • RSpec • Git

Proficient
Typescript • Angular • R

Familiar
NgRx • Python • C++

Extracurriculars

- ➔ Music. Choir singer with the Montreal Symphony Orchestra Chorus & others

Education

PHD / MA / B. MUS IN MUSIC TECHNOLOGY | McGill University 2022 / 2007 / 2004

- ➔ Researched intuitive user interfaces for reverberation effects [click for demo]
- ➔ Coursework included computer science fundamentals and statistical learning