

Matthew Wood | Full Stack Web Developer
w.matthew.wood@gmail.com
linkedin.com/wmattwood

Montréal | 5147990873

github.com/wmattwood

SUMMARY

Full stack developer with a deep understanding of software fundamentals, specializing in web technologies.
3+ years of experience in development with a 10 year background in Electroacoustic Music and Audio/DSP.

LANGUAGES & TECHNOLOGIES

JavaScript, Ruby, HTML, CSS, Python, SQL, CLI / Terminal / Bash / Zsh, Unix based systems

MongoDB, React.js, Ruby on Rails, Node.js, VSCode, Git/Github, REST APIs, JSON, OOP, React Hooks

RELEVANT WORK EXPERIENCE

Software Developer Intern	Espacemaker	March 2023 - Present
----------------------------------	-------------	----------------------

- Worked with a diverse team of hardware engineers, web developers, infrastructure engineers to build an RFID/FOB access system running on Raspberry PI devices.
- Build out technical requirements based on consultations with stakeholders from various departments.
- Wrote backend Python scripts to handle communication with the Zoho CRM API.
- Developed a data model for how members' training status should be stored.
- Learning Ansible and deployment automation including setting up cronjobs.
- Wrote documentation including a guided command-line script to allow new users to understand how to work with the existing codebase.

Technical Training & Support Desk	American Music & Sound	May 2012 - March 2021
--	------------------------	-----------------------

- Debugging software issues related to version compatibility across multiple OS platforms.
- Interface with remote engineering teams when necessary to resolve advanced technical issues.
- Beta test Python based “user remote scripts” for Ableton Live.
- Design custom scripts for batch renaming thousands of files via a regex extension.
- Communicate instruction sets for software installation and configuration, firmware updates, and usage.

Audio Engineer	Freelance	January 2012 - Present
-----------------------	-----------	------------------------

- Original music composition and asset creation for commercial sample libraries.
- Mastering services (Conforming to ITU BS.1770 standards and streaming platforms.)
- Music Theory and Digital Audio Theory education & private tutoring.
- Control surface programming and design using Max/MSP, Ableton Live, and Ableton API.

TECHNICAL SKILLS

Front End Development | Back End Development | Object Oriented Programming | Web | HTTP | Big-O Notation
Relational Databases | Non-Relational Databases | Debugging | Fogbugz | Unit Testing | Technical Troubleshooting

TRANSFERABLE SKILLS

Troubleshooting systems | Communicating complex ideas | Methodical problem solving | Working in teams
Learning quickly | Navigating documentation | Researching independently | Formulating questions | Googling

CURRENTLY LEARNING

Typescript | SQL | Ruby on Rails

JavaScript Algorithms and Data Structures w/Colt Steel

RECENT PROJECTS

- yourSchedule** yourschedule.onrender.com 2023
- A calendar-based scheduling web app intended for use within the live event industry.
 - Complete full stack web app using the MERN stack (Mongo/Express/Node/JS)
 - Back end built using Node.js, Express, Helmet, mongoDB
 - Calendar logic built using vanilla JavaScript and date-fns
 - Implemented site-navigation with react-router.
- Vote-time** wmattwood.github.io/vote-time 2023
- A custom SVG based interactive pie chart animation
 - Linked up to Firebase allowing multiple users to access and modify it in realtime.
 - Hosted using Github Actions via a yaml script file.
- Wearabyte E-Commerce** github.com/wmattWood/wearabyte_ecommerce 2022
- Worked with a four person team to deliver an online e-commerce site.
 - State managed using React hooks ie. useReducer, useState, useEffect etc.
 - Implemented optimistic rendering for checkout cart to avoid UI load times during database updates.
 - Delivered daily progress reports using a Trello board to track feature implementation and achieve milestones.
 - REST API design using Express, Helmet and mongoDB to perform CRUD operations on a database.
 - Used branching in Git to maintain development/feature branches as well as a deployment branch.
 - I was the problem solver on the team who took on the hard problems (ie. tracing logic and debugging when something was not functioning as intended.)

EDUCATION

- Full Stack Web Development Diploma** Concordia University 2022
- Learned both client and server side languages and frameworks with a strong emphasis on the MERN stack (Mongo, Express, ReactJS, and Node.) Covered RESTful APIs, stateful applications, context, React hooks, styled components, Git and database integration.
- Ruby Track Core Curriculum** Launch School 2021-2022
- Studied fundamental programming concepts in a methodical, mastery-based learning approach. Examinations were based on one-on-one "code interview" style evaluations. Covered topics included: methodical problem solving, OOP design principles (encapsulation, polymorphism, inheritance), mutation vs. assignment, pass by reference vs. pass by value, testing & debugging, and build automation using Rake. Occasionally used AWS for online REPL environment.
- Bachelor of Arts - Electroacoustic Music & Technology** Concordia University 2012
- Studied digital modular synthesis, digital audio theory, sampling, bit depth/sample rate, waveform editing, recording, and composition. While converting a video game controller into a MIDI controller for a live performance, I used a UDP (vs. TCP) connection to transmit control data between two OS instances running in parallel via a virtual network port. Created a syllabus for teaching DAW based composition.

LANGUAGES

English - Advanced/Fluent | **Français** - Intermediate/Advanced | **Mandarin Chinese** - Beginner (Spoken only)