Matthew Wood **|** Full Stack Web Developer   Montréal **|** 5147990873

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PROFILE SUMMARY

Full stack web developer specializing in translation and documentation of complex systems. 4+ years of experience in a variety of languages and frameworks, specializing in web development. I have worked on e-commerce sites, institutional websites, implemented forms, database handlers, backend code, and worked with both server side rendered web pages and client side rendered web applications (SPAs).

TECHNICAL COMPETENCIES

C#, JavaScript, HTML, CSS, ASP, Terminal/CLI, Python, Ruby, VBScript, Windows and Unix systems

Azure DevOps, React, MongoDB, Oracle/SQL, graphQL, Node.js, Git/Github, YAML, REST APIs, HTTP

PROFESSIONAL EXPERIENCE

Full Stack Web Developer   **MELCCFP** - Gouvernement du Québec   July 2023 - Present

- Managed MELCCFP legacy web tools migration and maintenance.
- Enhanced security with XSS and SQL injection safeguards.
- Migrated sites from ASP Classic to modern tech.
- Designed components for WCAG 2.1 and government standards.
- Documented 40+ interactive sites with functional and structural diagrams.
- Mapped 20+ years of undocumented services.
- Authored ASP Classic, VBScript, and ADODB primers.
- Expanded onboarding docs, growing team from 1 to 4 devs.
- Consulted with varied stakeholders in a complex org.
- Established version control and deployment guidelines.
- Optimized SQL requests.

Web Developer   **Éspacemaker** - Montréal QC   Mar 2022 - July 2023

- Collaborated with cross-departmental stakeholders for project analysis and planning
- Designed a system for wireless FOB access for industrial machinery.
- Developed Python scripts to manage remote connections and communication with the ZOHO CRM API.
- Constructed data models and flow charts for documentation purposes.
- Designed CLI tools for managing auth tokens.

Support Engineer   **JAM Industries** - Montréal QC   May 2012 - Mar 2021

- Designed and published scripts to perform file conversion via a regex extension.
- Resolved cross platform compatibility issues related to firmware and drivers.
- Documented software update procedures for firmware, drivers etc.
- Developed technical specification for studio installations.
- Tested Python user scripts for Ableton Live.
- Primary contact point within the organization for engineering teams in Japan, Sweden, UK, and Germany.

Freelance Audio Engineer   **Freelance** - Montréal   Jan 2012 - Sept 2023

- Original music compositions and sound design for sample libraries.
- Finalization and mastering services (to conform with ITU BS.1770 standards and streaming platforms)
- Teaching musical composition and digital audio theory.
- Programmed control surfaces with Max/MSP, HID, and the Ableton API.

Label Manager   **Digital Garden** - Montréal   Oct 2010 - Feb 2014

- Integration and graphical editing of album artwork and promotional materials.
- Worked with graphical editing software
- Event planning and social media marketing.
- Collaborated with web designers to create web sites and mockups.

EDUCATION

Diploma in Full Stack Web Development   Concordia University   2022-2023
(12 weeks) 760 hours

Studied both server side and front end languages and frameworks (Node.js, Javascript, React, Express, MongoDB) REST APIs, CSS, HTML, DOM, Github and integration of web applications with databases.

Programming and Backend Development   Launch School   2021-2023
(90 week online course) 1350 hours

Analyze and resolve problems methodically, maintain code, test and debug, automate installation of development tools with a strong focus on Ruby and Javascript (rake, rvm, npm, jest, rubocop, minitest).

Building responsive websites with HTML5 et CSS3   Stack Skills   2020-2021
(4 week online course)

Design of responsive interactive websites using media queries. Styling websites using a combination of jQuery and CSS stylesheets. Color theory, fonts, and user interface design in websites. HTML document structure and HTML5.

Bachelor Electroacoustic Music and Technology   Concordia University   2007-2012
(120 crédits)

Studio recording, digital audio theory, composition and programming.   Designed various interactive performance tools using Max/MSP and puredata. Developed pedagogical tools and resources for other students.

Courses in Information Technology and Media   Mark R. Isfeld High School   1998-2003
(5 years)

Technology path with a specialization in information technology. Digital Photo editing. Video production, editing, and live broadcasting. Analysis and specification of audio visual installations. Designed and built applications with Microsoft Visual Basic and VBScript.

Codecademy   Codecademy   2019-2021
(200 hours)

Online courses in SQL, JavaScript, TypeScript, Python, Ruby, and C#.

RECENT PROJECTS

Environmental reporting form

www.environnement.gouv.qc.ca/formulaires/plainte/form.asp   2024

- **Developed a dynamic HTML5 web form** with JavaScript, CSS, Bootstrap, and jQuery, integrating ASP functions to enhance user interactivity and design consistency.

- **Implemented secure, parameterized queries** in VBScript/ASP Classic using ADODB, strengthening data integrity and protecting against SQL injection vulnerabilities.

- **Built and deployed Selenium-based tests** to automate validation of page functionality, increasing reliability and reducing manual testing time.

- **Engineered creative solutions** to overcome ASP Classic limitations in parameter encoding, ensuring consistent data handling.

- **Revamped web design to meet government accessibility standards**, aligning with best practices and improving the site's usability for all users.

- **Resolved complex server-side encoding conflicts** between UTF-8 and Windows-1252, eliminating errors and ensuring accurate character display across platforms.

- **Researched and implemented a solution for DMARC verification issues**, resolving email delivery failures and ensuring reliable communication for all users.

Hydrological and hydraulic forecast map and monitoring of hydrometric stations

www.cehq.gouv.qc.ca/atlas-hydroclimatique/stations-hydrometriques/index.htm   2023

- **Led troubleshooting** to identify and resolve frequent page crashes due to high user volume, tracing the issue to excessive simultaneous database requests.
- **Proposed and implemented** a data handling solution by replacing live database queries with JSON files generated every 15 minutes, improving stability and performance.
- **Reduced server load significantly** by shifting from repeated database requests to pre-packaged data packets, eliminating the need for individual database connections on each page load.
- **Enhanced user capacity**, increasing the page's scalability to support over 30,000 users per hour without crashing.
- **Refined display logic** to address and correct graphical errors, ensuring accurate representation of hydrological data using Highcharts.js.
- **Transitioned legacy ASP Classic architecture** towards a more modern, data-efficient approach, reducing reliance on real-time database connections.

Personal Portfolio

https://portfolio-site-pi-three.vercel.app/   2023

- **Implemented GraphQL requests** to display the latest projects published on my personal GitHub, enhancing visibility of recent work on my portfolio.
- **Developed a Ruby on Rails API** to manage and publish blog articles from a desktop client, streamlining content updates and management.
- **Designed and deployed a responsive layout** for seamless mobile and desktop experiences, ensuring accessibility across devices.
- **Built a modern web application** using Vite and React, hosted on Vercel, optimizing performance and deployment efficiency.

Your Schedule

yourSchedule.onrender.com   2022

- A **calendar-based scheduling system** designed for the entertainment industry.
- **Full-stack web application** built using the MERN stack (MongoDB, Express, Node.js, JavaScript).
- **Back-end system** developed with Node.js, Express, Helmet, and MongoDB for secure data management.
- **Calendar logic** implemented using JavaScript and date-fns for date manipulation and scheduling functionality.

Vote-time

WMattWood.github.io/vote-time 2023

- Interactive circular graphic animation built with SVG.
- Real-time collaboration enabled through Firebase, allowing multiple users to access and modify the animation simultaneously.
- Hosted using GitHub Actions with a YAML script for automated deployment and updates.

Wearabyte E-Commerce 2022

- Collaborated with a team of four to deliver a corporate eCommerce website, ensuring efficient teamwork and task distribution.
- Reported daily progress using Trello boards, maintaining clear communication and tracking project milestones.
- Designed and implemented backend code with a REST API using Express and MongoDB for efficient data management and integration.
- Managed version control and development branches through GitHub, ensuring smooth collaboration and code integrity.
- Solved complex problems under pressure, maintaining focus on delivering high-quality results within tight deadlines.
- Utilized Agile development methodology to ensure adherence to development plans and timelines.

LANGUAGES

French - Fluent | **English** - Native | **Mandarin Chinese** - Beginner (Spoken only)

SOFT SKILLS

System Troubleshooting | Communication of Complex Ideas | Methodical Problem Solving | Quick Learning Documentation | Navigation | Teamwork | Independent Research | ffmpeg | Figma | Trello | Positive Attitude