Renoir Boulanger

SUMMARY

Deep technical expert in the Open Web Platform, crafting framework-agnostic solutions through native browser capabilities and Web Standards. Full-stack developer with comprehensive depth - from kernel-level system tracing through JavaScript framework internals to precise CSS implementations. Approaches solutions with systematic analysis across all layers, emphasizing longevity through standards-based patterns over framework-specific features. Ensures thoughtful attention to visual details, accessibility, and internationalization to support diverse user needs across languages and cultures. Creates verifiable solutions through test-driven development (TDD), detailed technical specifications, and systematic package management. Demonstrates expertise in high-performance web server infrastructure and frontend implementations, maintaining careful consideration for speed, visual consistency, and adaptability.

- Polyglot programmer implementing precise solutions in TypeScript, ECMAScript, JavaScript, PHP, Bash, GNU Make, C#, Python
- Experience in Infrastructure As Code with Salt Stack, Vagrant, Ansible, Puppet
- Technical contributor to open-source projects with publicly available implementations: Nuxt.js documentation, Alpine Linux package maintenance, MediaWiki compatibility tables, and Mozilla Firefox Accounts
- Architected documented hosting infrastructure for high-visibility sites including W3C's WebPlatform Docs project https://webplatform.github.io/ and The World Wide Web's 25th anniversary site https://www.w3.org/webat25/
- Deep expertise in Cloud IaaS, Containers, and continuous deployment systems with emphasis on reproducible builds and consistent environments

EXPERIENCE

Full-time parenting — *Father*

June 2022 - September 2024 Full-time caregiver for children.

GoTo Inc. — Staff Software Developer

January 2021 - May 2022

Contributed to an established micro-frontend architecture based on Web Components and lit-element, helping teams leverage its framework-agnostic foundations. Provided technical guidance on native Web Platform capabilities, demonstrating how to maintain accessibility and performance while integrating with React, and other frameworks. Created documentation and working examples showing how to effectively use the existing component system across different technology stacks.

- Contributed architectural improvements to the Application Shell infrastructure, enabling seamless integration of diverse product experiences
- Helped development teams understand and effectively utilize the Web Components architecture, ensuring consistent implementation across different framework contexts (<u>Fast.design</u>, React, <u>Lit.dev</u>)
- Built and documented integration patterns demonstrating how to properly implement new features within the established component system
- Developed examples and test suites validating accessibility and internationalization implementation within the architecture

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https://linkedin.com/in/renoirb https://x.com/renoirb https://github.com/renoirb https://gitlab.com/renoirb

SKILLS

Programming

PHP, C#, VCL, Bash, Python

Web Development Languages

TypeScript, JavaScript, ECMAScript, HTML/CSS

PHP Frameworks

Symfony, Slim, Composer/Packagist

Frontend Frameworks

Nuxt.js, Vue.js, Koa.js, Element UI, Backbone.js, Marionette.js, Angular

Web Development Libraries

Rollup, Bili, Rush.js

Frontend Testing Frameworks

Jest, CodeceptJS, Playwright, AVA, Mocha, Jasmine

Web Platform

Accessibility, Adaptative, Bundling, Deployment, HTML/CSS Architecture, Polyfills, Promises, Responsive, Transpilation

Web Operations

Configuration Management, Docker Swarm, Dockerflow, ElasticSearch, Node.js, Prometheus, Redis, Salt Stack, Self-Healing event handlers, Service Monitoring, Varnish

RBC Royal Bank of Canada Inc. — Senior Full Stack Developer

March 2020 - December 2020

At RBC, I served as a Senior Full-Stack Developer, leading the implementation of scalable modules for the RBC Omni platform (Online Business Banking). I collaborated closely with cross-functional teams to deliver solutions aligned with business objectives. Noteworthy achievements include streamlining developer onboarding processes and enhancing legacy systems for improved performance and reliability.

- Make implementation proposals driven by the requirements and agenda set by product owners and business analysts.
- Build scalable and reusable modules by collaborating with other production teams, including the design system/platform team.
- Rewritten new developer onboarding documentation and completely
 automated how to properly setup the current password to be used properly
 through Git and other scripting, including the Bank's authoritative self-signed
 certificate that would cause many headaches.

CGI Inc. — Senior Technical Consultant (Lead Frontend)

May 2017 - February 2020

As a Senior Technical Consultant, I led the development of Unify360, a Multi-Cloud Management Platform. Leveraging microservices architecture and atomic design principles, I orchestrated the design and implementation of a robust frontend solution deployed across multiple regions. My role involved extensive experimentation with modern technologies and mentoring team members to foster a culture of innovation.

- Experiment and document Frontend software development platform technological choices
- Lead the team that work and coach for writing code with tests, making selfcontained and re-usable packages

AlayaCare — Senior Software Developer

November 2016 - May 2017

During my tenure at AlayaCare, I focused on optimizing Docker Compose builds and enhancing team productivity through streamlined workspace setups. I led initiatives to automate development environment configurations, reducing setup time from days to hours. My efforts significantly improved collaboration and efficiency across the software development team.

 Overhaul of the Software development team's workspace setup, which allowed anyone to have exactly the same setup by invoking a few simple commands. A fresh computer would be ready after 1h instead of taking multiple days and asking around to other colleagues.

Colloquial / Betastream — Systems Delivery Blueprinting Specialist (remote)

January 2016 - June 2016

I designed and implemented robust cloud orchestration solutions, automating deployment processes across multiple cloud platforms.

- Introduce and coach the team Continuous Delivery and Code release, and deployment system.
- Plan, Review, and Build a next-generation infrastructure and deployment system for the project production pipeline.

EDUCATION

Université de Sherbrooke, CeFTI

INF731 - Object-Oriented
Programming in C#
INF743 - Software Architecture
INF747 - Designing and managing
Enterprise Information Systems
June 2024

Udemy

Nuxt.js - Vue.js on Steroids Understanding TypeScript

EggHead.io

Use Types Effectively in TypeScript Up and Running with TypeScript Get Started with ElasticSearch Build a Server Rendered Vue.js App with Nuxt and Vuex

VueMastery

Real World Vue.js Mastering Vuex Next-Level Vue Scaling Vue with Nuxt.js Advanced Components

Pearson Vue

Zend Certified Engineer PHP 5.3 July 2013

McGill University

CEEN-421-761 - English in Written Communication Contexts CMSC-000-781 - Foundations of Mathematics CMSC-101-771 - College Algebra and Functions

University of Montreal

December 2013

Web Accessibility (WCAG 1) at the Nazareth & Louis Braille institute

July 2008

CAE — Systems Delivery Blueprinting Specialist

March 2016 - June 2016

At CAE, I provided expert guidance on continuous delivery and code release strategies, contributing to the evaluation and implementation of real-time monitoring solutions. I collaborated with cross-functional teams to assess and recommend open-source tools, ensuring compliance with stringent security requirements. My initiatives facilitated seamless deployment and monitoring of critical systems.

- Introduce and coach the team Continuous Delivery and Code release, and deployment system. Including techniques for preparing "playbooks" packages for deployment within the airtight (securized) private network.
- Compared Prometheus, Heka, Ganglia, Grafana, Kibana, and other TimeSeries
 aggregation and visualization systems. The ideal system had to take into
 account the airtight networking policies which included corporate TLS
 certificate, and deployment targets would often be inaccessible to the Internet.

Mozilla — Subject Matter Expert Compatibility Data Project

August 2015 - January 2016

As a Subject Matter Expert on the Compatibility Data Project at Mozilla, I spearheaded software architecture discussions and collaborated with stakeholders to define project requirements. My contributions included developing innovative solutions for data visualization and storage, enabling developers to access accurate compatibility information across various web browsers.

• Communicate with various stakeholders about the requirements and features for the system.

W3C/MIT — Developer Operations Engineer

August 2013 - August 2015

At W3C/MIT, I played a key role in maintaining and enhancing the WebPlatform Docs project, overseeing infrastructure stability and feature development. I implemented robust monitoring solutions and streamlined deployment processes, ensuring optimal performance and reliability. My efforts contributed to the project's success in becoming a premier resource for web developers worldwide.

- Convert and preserve many hundred thousand edits, and keep trace of the content edition contributors and date of the change from MediaWiki into Static site generators and Git (2015)
- Improved Infrastructure deployment code so that any service could be rebuilt systematically (2015)
- Designed and Implemented Single Sign-On solution using OAuth2 (2014)

Ericsson — Web Developer

February 2012 - June 2013

As a Web Developer at Ericsson, I led the development of a web-based virtualization provisioning portal, enabling users to initiate virtual machines across geographically dispersed data centers. My role involved architecting and implementing innovative solutions using cutting-edge technologies, driving improvements in scalability and performance.

• Architect, build and lead a Web-based "Virtualization provisioning" portal.

IBM

IBM WebSphere DataPower SOA Appliance

July 2007

Canadian Armed Forces

Basic training at Royal Military
College Saint-Jean
Private (Basic), assigned to
Sherbrooke 714th
Communication Squadron
Wired and wireless
communication and information
systems (Introductory training)
Winter warfare training
January 2000

PUBLICATIONS

- Santachè, A. "Mobile development using web technologies focusing on games", ACM, ISBN 978-1-4503-2559-2 Participated in chapters related to "Markup architecture", "Events" and "Web Storage"
- Kumar, J. "Apache Solr PHP Integration", Pakt Publishing, ISBN 9781782164920
 Book review
- « Techniques pour déployer WordPress de façon consistante et les rendre résilients »,
 WordCamp Montréal 2016 Talk given at WordCamp Montréal 2016
- "Packaging for easier redeployment", DevOps Montréal Presented at two events, DevOps Montréal, PHP Québec.
- « Comment évaluer le niveau de qualité d'un site web selon les techniques d'intégration web d'actualité. », Web à Québec 2013 Presented at two conferences;
 « Montreal Webln », and

Evocatio Solutions technologiques Inc. — Senior Web Developer, Co-Founder

January 2010 - March 2012

As Senior Web Developer and Co-Founder of Evocatio Solutions, I led web development projects for prestigious clients, including UDA and Astral Media. My responsibilities encompassed architecting frontend solutions, collaborating with graphic designers, and optimizing web applications for performance and usability. Notable achievements include spearheading major website rewrites and implementing advanced e-mail delivery systems.

- Lead and architect all Web Development work related to the FrontEnd layer of the stack.
- In touch with Graphic Designers and Project Managers to create valid HTML/CSS markup that reflects the designs, and to work on all Web Browsers of the moment.
- Take Adobe Photoshop and PDFs document and create HTML/CSS Static style guides (minimal JavaScript, no back-end) to create CSS pattern libraries.

Groupe Informatique TechSolCom Inc. — Web Developer

October 2006 - August 2009

During my tenure at Groupe Informatique TechSolCom Inc., I played a pivotal role in maintaining the company's web presence and contributing to internal R&D projects. I led the front-end development aspect of a proprietary CI server web application and participated in building inventory management systems. My contributions enhanced operational efficiency and scalability across various projects.

- Maintain the company corporate image on the web, maintain their Web site, and participate in projects run internally as a Web developer on R&D projects.
- Participated in maintaining company internal network, testing DataPower blade, Virtualized servers on bare metal, and web hosting infrastructure.
- Participated in building a proprietary CI server Web Application ("Beebox") for IBM WebSphere that was intended to be a competitor to Jenkins and Cruise Control of the time. (2007-2009)
- Contributed to Inventory management application ("Namminik") as an internal R&D experiments to make a Web Application also have its native iOS client. (2009)

Câble Axion Digitel — Web Developer

October 2005 - November 2006

My role was to rewrite the corporate website, maintain internal applications and answer to level-2 support calls from subscribers.

INEXIS Solution web Inc. — Web Developer, Owner

February 2002 - November 2006

INEXIS Solution web Inc., was a one-man web development service provider firm I founded to serve graphic design agencies in the region of the Eastern Townships. Services included managing own private Web hosting infrastructure and building HTML/CSS pages based on PDF files provided by graphic designers, creating e-mail templates.