Romain J. Giovanetti

Full-Stack
Software Engineer
romain@giovanetti.fr

Profile

Full-Stack Engineer with **11 years of international experience** in designing, developing, and maintaining scalable web applications.

Passionate about **high-quality code, user-centric design, and performance optimization**.

Specializing in **modern web technologies**, including React.js, Node.js, Java EE, Symfony, and microservices architecture.

Strong **problem solver** with a focus on **system design, scalability**, and cloud deployments (AWS, Docker).

Main Skills

Fields

- **Critical Thinking** & **Problem Solving**
- **Usability** & **Performance Optimization**
- **Software Architecture & System Design**
- Software Development Life Cycle
- Code Quality & Testing
- Cloud Architecture & Scalability
- Security & Authentification

Technologies

- **Front-End:** React.js, Redux, TypeScript, Storybook, SASS, MobX
- **Back-End:** Node.js, Express, Java EE/ Spring Boot, Symfony, RESTful APIs, Microservices
- **Databases:** MySQL, MongoDB, Oracle PL/SQL, Elasticsearch
- **DevOps & Cloud:** Docker, Git, AWS
- **Testing & Tooling:** Jest, PHPUnit

Languages

French (Native), **English** (Fluent, PTE Academic 84/90, CEFR C1)

Experience

Nov. 2023 - Today
Saint-Memmie France

Full-Stack Engineer (Freelance)

La Maison De L'Eleveur

- Enhanced front-end performance and user experience, boosting engagement and navigation, increasing conversion rates, and raising the **Google Lighthouse score from 83 to 94**.
- Upgraded back-end from **Symfony 4 to Symfony 5**, with extensive **code refactoring**, improving scalability, maintainability, and performance—reducing page load time by **up to 75% (from 1200ms to 300ms)**.
- Overhauled email management system with **enhanced security protocols and email signing**, reducing email rejection rates by **80%** and improving deliverability.

Champagne Carole Haudot

- Developed a **custom configuration interface**, transforming a previously static website into a more dynamic and manageable platform.

Saint Joseph College of Maasin, Leyte, Philippines

- Took over and **revamped an unfinished grading application**, originally developed by a student, addressing **critical security flaws, extensive bugs, and unstable code**. Refactored key components, implemented new features, and continue to enhance its functionality and security.

May 2023 - Oct. 2023
Melbourne, Victoria Australia

Software Engineer (Frontend) – Specialist Experience Team

Canva

- **Implemented infinite scroll on the user activity log page**, enabling specialists to access unlimited historical data for troubleshooting. Optimized data fetching by handling microservices with and without pagination support, using **React,** and **MobX.**

- **Designed and developed a dynamic theme module** to enable seamless integration of seasonal and event-based decorations (e.g., April Fool's, Christmas) into the web application.

- **Refactored the codebase**, replacing deprecated components and services, and migrating internal API calls and components to their latest versions, resulting in improved **stability, maintainability, and performance**.

- **Increased test coverage** by implementing **comprehensive unit tests** for previously untested component presenters.

- **Contributed to shaping an 18-month strategy** to mitigate **linear cost escalation** due to user growth by leveraging **machine learning**, **OpenAI language models, and usability enhancements** for specialist tools.

Dec. 2019 - Apr. 2023
Saint Memmie
France

Full-Stack Engineer (Freelance)

La Maison De L'Eleveur

- **Developed an automated quote generation system** handling 39 different templates using **Dompdf**, enabling seamless creation and delivery of PDF quotes to customers. This **freed up the workload of 2.5 team members**, allowing them to focus on higher-value tasks.

- Initially **built 8 custom product assistants using vanilla JS**, allowing customers to easily order products like **custom-cut metal sheets, pre-assembled kit doors for agricultural buildings**, and **gutters** on the website. Later, **rewrote one assistant** using **React and TypeScript** for improved performance and scalability.

- **Designed and implemented dynamic pricing modules**, calculating product prices based on multiple factors, including **custom specifications and quantity/ length**.

- **Enhanced website reliability** by adding **comprehensive test classes** to prevent regressions.

- **Refactored and upgraded the website** from **Symfony 3 to Symfony 4**, improving **performance, security, and maintainability**.

- **Developed a custom order management system**, allowing **quotes to be converted into orders** using a **temporary token**.

- **Developed a tracking module that monitors unfinished orders** at each step. If a customer abandons an order, a commercial representative is alerted to follow up via call or email.

Champagne Carole Haudot

- **Designed and built a modern website** featuring a **simple online shop**, leveraging **React and React Redux** for a smooth user experience.

May 2018 - Nov. 2019
Princeton, New Jersey
United States of
America

Software Developer (International Volunteer in Business Program)

Coface North America

- **Maintained and enhanced** policy management and collection back-office support applications, working with **Java EE (Servlets, JSP) and Oracle PL/SQL**.

- **Contributed to solution architecture and design**, optimizing system interactions and database queries for better performance.

- **Designed and developed interfaces** to facilitate seamless communication between different software applications.

- **Developed a debugging tool for PDF generation**, allowing the team to bypass the **manual multi-step policy creation process** by directly passing XML documents for PDF output. This significantly **reduced debugging time and improved efficiency**.

- **Maintained and updated the development team wiki**, ensuring accurate and up-to-date documentation.

- **Refactored and maintained legacy code**, improving maintainability and performance where possible.

- **Strengthened application security** following a **penetration test**, implementing a **password encryption upgrade** and a **complete rework of the "Forgot Password" process**, reinforcing security across the main application and related services.

Sep. 2017 - Apr. 2018
Saint Memmie
France

Full-Stack Engineer (Freelance)

La Maison De L'Eleveur

- **Founded and managed a freelance business in France as a sole trader, delivering full-stack development projects for clients.**
- **Migrated their website from Symfony 2 to Symfony 3**, resolving compatibility issues and improving security and maintainability.
- **Developed and optimized new website features** using **Symfony 2/3, MySQL, Bootstrap, and jQuery**, enhancing user experience and streamlining online transactions.
- **Assisted in setting up a secondary website** for the company's **garden and home supply retail store**. Created a fork of the existing platform and ensured a smooth technical foundation, allowing the client's team to take over its development.

Oct. 2014 - Aug. 2017
Lille
France

Research And Development Engineer

CNRS / Université de Lille / CRIStAL Lab. / NOCE Team

- **Published two papers** in the **IEEE International Conference on Advances in Social Network Analysis and Mining (ASONAM) 2016**.
- **Evaluated and documented** existing methods for collecting and processing tweets for social network analysis.
- **Designed, built, and maintained a distributed platform** capable of collecting and processing **up to 2 million tweets per day**, with a **2-year full data retention policy**, powered by **Elasticsearch and TensorFlow**.
- **Developed a secured internal API** for **remote control of the distributed platform and efficient data retrieval**, implementing **JSON Web Token (JWT) authentication**.
- **Built an interactive and user-friendly dashboard** to visualize processed data for third-party users, using an **asynchronous stack with AngularJS, Node.js, and Express.js**, with **JWT-based authentication** for secure access.
- **Researched and developed software prototypes** for **sentiment analysis, gender detection, and geolocation extraction from tweets**, using **simple algorithms and recursive neural networks**.

Jun. 2014 - Sep. 2014
Vouziers
France

Full-Stack Engineer

La Maison De L'Eleveur

- **Built a fully custom e-commerce website** to replace their previous **WordPress-based solution**, which had excessive, unnecessary options. The new system provided a **streamlined, easy-to-use configuration panel** tailored to their specific needs.
- **Designed the UI in Sketch**, exploring **three different design approaches— skeuomorphism, abstract, and a hybrid of both**—before implementing the final version.
- **Rebuilt the entire website from scratch** in just **3 months**, using **Symfony 2, MySQL, Bootstrap, and jQuery**, improving performance, maintainability, and flexibility.
- **Revamped the online product catalog** (1,500+ references) and **introduced an intuitive UI for configuring custom-tailored steel sheets**, reducing the number of page loads needed to reach a product from **10 to just 3**, significantly improving user experience.

Mar. 2013 - Feb 2014

Lille
France

Research And Development Engineer

CNRS / Université de Lille / CRIStAL Lab. / NOCE Team

- **Designed and built custom-made bracelets** that communicated with each other using **Arduino Nano, Xbee modules, RFID chips, and other components**, enabling interactive experiences.

- **Developed custom contactless quiz terminals** using **Arduino Mega, Ethernet shields, and RFID shields**, enhancing user engagement and interactivity.

- **Created a central control system** using **Java and MongoDB** to remotely manage, configure, and log usage of the custom devices.

- **Built a data visualization dashboard** with **Node.js, Express, and MongoDB**, allowing stakeholders to filter and interpret usage data in a meaningful way.

- Deployed and maintained the custom devices and control system at the **Museum of Fine Arts in Tourcoing, France**, and conducted user experience evaluations to assess performance and gather feedback.

Explore more of my work and side projects at giovanetti.fr/resume

Education

Master's Degree in Computer Science, Université de Lille, France (2013)

- Exchange program at TU Graz, Austria (2012)

Links

🏠 **giovanetti.fr**

○ **github.com/ganoninc**

in **linkedin.com/in/romainjg**

</> **leetcode.com/RomainJG**