

<b>Profile</b>	<p><b>Full-Stack Engineer with 12 years of international experience building user-centric web applications.</b></p> <p>Passionate about clean code, performance, and thoughtful system design, with hands-on experience across monolithic systems and cloud-native microservices.</p> <p>Specialized in React, Node.js, Java/Spring, Symfony, and containerized deployments on AWS (Fargate, Terraform, Docker).</p>
<b>Main Skills</b>	<p><b>Core Skills</b></p> <ul style="list-style-type: none"><li>• Full-Stack Web Development</li><li>• Software Architecture &amp; System Design</li><li>• End-to-End Ownership</li><li>• Performance Optimization &amp; Scalability</li><li>• Cloud &amp; Distributed Systems</li><li>• Microservices Architecture</li><li>• Code Quality, Testing &amp; Maintainability</li></ul> <p><b>Technologies</b></p> <ul style="list-style-type: none"><li>• <b>Front-End:</b> React.js, TypeScript, Redux, MobX</li><li>• <b>Back-End:</b> Node.js, Java / Spring Boot, Symfony, Microservices</li><li>• <b>Databases:</b> MySQL, PostgreSQL, Oracle / PL/SQL, MongoDB, Elasticsearch</li><li>• <b>Cloud, DevOps:</b> AWS (Fargate, S3, CloudFront), Docker, Terraform</li><li>• <b>Observability &amp; Monitoring:</b> OpenTelemetry, Prometheus, Grafana</li><li>• <b>Testing &amp; Tooling:</b> Jest, Junit, Mockito, PHPUnit, Python</li></ul>
<p><b>Languages</b> French (Native), English (Fluent, PTE Academic 84/90, CEFR C1)</p>	
<p><b>Experience</b></p>	
Nov. 2023 - Today Saint-Memmie France	<p><b>Full-Stack Engineer (Freelance)</b></p> <p><b>La Maison De L'Eleveur</b></p> <ul style="list-style-type: none"><li>• Enhanced front-end performance and user experience, boosting engagement and navigation, increasing conversion rates, and raising the <b>Google Lighthouse score from 83 to 94</b>.</li><li>• Upgraded back-end from <b>Symfony 4 to Symfony 5</b>, with extensive <b>code refactoring</b>, improving scalability, maintainability, and performance—reducing page load time by <b>up to 75% (from 1200ms to 300ms)</b>.</li><li>• Redesigned the email system with <b>SPF, DKIM, and DMARC</b> implementation, improving security and <b>reducing email rejection rates by 80%</b>.</li><li>• Decoupled email processing using <b>message dispatching, partial asynchronous handling</b>, and a <b>retry queue</b>. Built space-efficient custom message handlers to ensure <b>reliable delivery within shared hosting constraints</b> (Apache + PHP, no native background workers).</li></ul> <p><b>Champagne Carole Haudot</b></p> <ul style="list-style-type: none"><li>• Developed a <b>custom configuration interface</b>, transforming a previously static website into a more dynamic and manageable platform.</li></ul> <p><b>Saint Joseph College of Maasin, Leyte, Philippines</b></p> <ul style="list-style-type: none"><li>• Took over and <b>revamped an unfinished grading application</b>, originally developed by a student, addressing <b>critical security flaws, extensive bugs, and unstable code</b>. Refactored key components, implemented new features, and continue to enhance its functionality and security.</li></ul>
May 2023 - Oct. 2023 Melbourne, Victoria Australia	<p><b>Software Engineer (Frontend) – Specialist Experience Team</b></p> <p><b>Canva</b></p> <ul style="list-style-type: none"><li>• <b>Implemented infinite scroll on the user activity log page</b> of a specialized internal web app, enabling troubleshooting specialists to access unlimited historical data. Optimized data fetching by handling microservices with and without pagination support, using <b>React</b>, and <b>MobX</b>.</li></ul>

- **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**.
- Introduced full responsiveness to the front-end, tweaked the UI for touchscreens, and optimized the website for tablets and smartphones, enhancing the mobile experience.
- 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.
- 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.

##### **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  
USA

#### **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.

	<ul style="list-style-type: none"> <li>• <b>Strengthened application security</b> following a <b>penetration test</b>, implementing a <b>password encryption upgrade</b> and a <b>complete rework of the “Forgot Password” process</b>, reinforcing security across the main application and related services.</li> </ul>
Sep. 2017 - Apr. 2018 Saint Memmie France	<p><b>Full-Stack Engineer (Freelance)</b></p> <p><b>La Maison De L'Eleveur</b></p> <ul style="list-style-type: none"> <li>• <b>Migrated</b> the codebase from Symfony 2 to Symfony 3, <b>refactored</b> legacy code, and resolved compatibility issues, enhancing security and maintainability.</li> <li>• <b>Developed and optimized new website features</b> using <b>Symfony, MySQL, Bootstrap, and jQuery</b>, enhancing user experience and streamlining online transactions.</li> <li>• <b>Assisted in setting up a secondary e-commerce website</b> for the company's <b>garden and home supply retail store</b>. Created a fork of the existing platform and ensured a smooth technical foundation, allowing the client's team to take over its development.</li> </ul>
Oct. 2014 - Aug. 2017 Lille France	<p><b>Research And Development Engineer</b></p> <p><b>CNRS / Université de Lille / CRISTAL Lab. / NOCE Team</b></p> <ul style="list-style-type: none"> <li>• <b>Published two papers</b> in the IEEE International Conference on <b>Advances in Social Network Analysis and Mining (ASONAM) 2016</b>.</li> <li>• <b>Designed, built, and maintained a distributed platform</b> capable of collecting and processing <b>up to 2 million tweets per day</b>, with a <b>2-year full data retention policy</b>, powered by <b>Elasticsearch and TensorFlow</b>.</li> <li>• <b>Developed secured internal APIs</b> for remote control of the distributed platform and efficient data retrieval, implementing <b>JSON Web Token (JWT)</b> authentication.</li> <li>• <b>Built an interactive and user-friendly dashboard</b> to visualize processed data for third-party users, using an <b>asynchronous stack with AngularJS, Node.js, and Express.js</b>, with <b>JWT-based authentication</b> for secure access.</li> <li>• <b>Researched and developed software prototypes</b> for <b>sentiment analysis, gender detection, and geolocation extraction from tweets</b>, using <b>simple algorithms and recursive neural networks</b>.</li> </ul>
Jun. 2014 - Sep. 2014 Vouziers France	<p><b>Full-Stack Engineer</b></p> <p><b>La Maison De L'Eleveur</b></p> <ul style="list-style-type: none"> <li>• <b>Built a fully custom e-commerce website</b> to replace their previous <b>WordPress-based solution</b>, which had excessive, unnecessary options. The new system provided a <b>streamlined, easy-to-use configuration panel</b> tailored to their specific needs.</li> <li>• <b>Designed the UI in Sketch</b>, exploring <b>three different design approaches—skeuomorphism, abstract, and a hybrid of both</b>—before implementing the final version.</li> <li>• <b>Rebuilt the entire website from scratch</b> in just <b>3 months</b>, using <b>Symfony 2, MySQL, Bootstrap, and jQuery</b>, improving performance, maintainability, and flexibility.</li> <li>• <b>Revamped the online product catalog</b> (1,500+ references) and <b>introduced an intuitive UI for configuring custom-tailored steel sheets</b>, reducing the number of page loads needed to reach a product from <b>10 to just 3</b>, significantly improving user experience.</li> </ul>
Mar. 2013 - Feb 2014 Lille France	<p><b>Research And Development Engineer</b></p> <p><b>CNRS / Université de Lille / CRISTAL Lab. / NOCE Team</b></p> <ul style="list-style-type: none"> <li>• <b>Designed and built custom-made bracelets</b> that communicated with each other using <b>Arduino Nano, Xbee modules, RFID chips, and other components</b>, enabling interactive experiences.</li> <li>• <b>Developed custom contactless quiz terminals</b> using <b>Arduino Mega, Ethernet shields, and RFID shields</b>, enhancing user engagement and interactivity.</li> </ul>

- **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.

**Publications**

**Computer architecture model for flexible social network analysis**

Giovanetti, R. & Lancieri, L | 2016 ASONAM 2016

**Multilevel exploration in Twitter streams**

Giovanetti, R. & Lancieri, L | 2016 ASONAM 2016

**Education**

**Master's Degree in Computer Science**

Université de Lille, France (2013)

- Erasmus Exchange program at TU Graz, Austria (2012)

**Bachelor's Degree in Computer Science**

Université de Lille, France (2011)

**University Diploma in Computer Science (DUT Informatique),**

Université de Reims Champagne-Ardenne, France (2010)

**Links**

 [giovannetti.fr](http://giovannetti.fr)

 [github.com/ganoninc](https://github.com/ganoninc)

 [linkedin.com/in/romainjg](https://linkedin.com/in/romainjg)

 [leetcode.com/romainjg](https://leetcode.com/romainjg)