Alexandre Cailhier

Full-Stack web developer

📞 On demand

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📍 Montreal, Quebec, Canada
Open to relocate
Open to remote work

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SUMMARY

- Bilingual (English & French) Full-stack Web Developer with a professional background in data-based decision support tools development. Experienced in consulting for smart cities technological project deployment, focusing on data governance and lifecycle.
- Currently working on building customized and responsive websites, web apps and mobile apps with in-demand programming languages / tools and with a focus on delivering the best User Experience and Interaction (UX/UI).
- Looking to pursue a career as a web developer on interesting projects aiming at developing the best products for the best user experience possible.

KEY SKILLS AND TECHNOLOGIES

HTML, CSS, JavaScript, React, React Native, Bootstrap, React Bootstrap, Recharts, Angular, Angular Material, TypeScript, Python, Django, Node.js, Express, Mongo DB, PostgreSQL, Heroku, Netlify, AWS, Jest, Puppeteer, Cucumber, Git, Github, Excel, ArcGIS, Asana, Jira, Miro, Confluence, Slack, Mailchimp

EDUCATION / CODING PROJECTS

Certificate in Full-Stack web development, Career Foundry   **Apr 2023 - Present**

Project: Chat mobile app
- Built a React Native mobile app using Firebase (for database, media storage and anonymous authentication), allowing users to send messages, audios, images, take pictures and share location in real-time.
- This app contains some offline features and has been developed with Expo and Android Studio.

Tech stack: React Native, JavaScript, Firebase (database, storage, authentication), Expo, Expo Go, Android Studio

Project: Meet web app
- Built a serverless, progressive web application (PWA) with React using Google OAuth / AWS Lambda serverless functions for user's authentication and Google Calendar API to fetch different events.
- Developed under the Test-Driven Development (TDD) and Behavior Driven Development (BDD) techniques.
- This app has an easy-to-use design to help users find the next event they would like to attend. It has modern features, such as OAuth authentication process, the ability to be installed as a desktop or mobile app and to be used offline.

Tech stack: React, JavaScript, HTML, CSS, AWS Lambda, Google OAuth, Google API console, Jest, Cucumber, Puppeteer, Atatus, Recharts

Project: myFlix web app
- FRONTEND: Built a single-page responsive web app (SPA), designed with state-based routing, several interface views to facilitate users CRUD operations, a responsive design to be optimal on any device and polished visuals for the best user experience possible.
- This app has a pleasant and modern design to help users find the next movie they would like to watch, as well as allowing them to create a list of favorite movies.

Tech stack: HTML, CSS, JavaScript, React, React Bootstrap, Netlify

- BACKEND: Built a REST API from scratch using the MERN tech stack to power myFlix frontend and ensure easy interactions for users whenever they're accessing the web app to read and save information about different movies. Include the server, business logic, and business layers.
- This API was built with several endpoints allowing users to do all types of CRUD operations. The data used for myFlix is stored in a modern and efficient database (MongoDB). Various security measures have also been implemented, such as HTTP authentication, JWT token generation and Cross-Origin Resource Sharing (CORS).

Tech stack: Node.js, Express, JavaScript, PostgreSQL, MongoDB, Heroku, Postman

- Command-line version of a recipe app built with **Python** / web version of this app using **Django** framework
- Movie web app built with **Angular**
- Pokedex web app built with data fetched from an **external public API**

Master in land management and development (urban planning), Laval University	**May 2020**
Certificate in English language improvement program, University of Calgary	**Aug 2019**
Bachelor in anthropology, University of Montreal	**May 2018**

PROFESSIONAL EXPERIENCE

Open North, Remote (Montreal, QC)	**Jan 2022 – Jun 2023**

Senior Analyst in data and technology policies

Project 1: Consulting program on data governance best practices
- Contributed to the creation and the deployment of a consulting program on data governance for +10 organizations from various sectors.
- Analyzed 2 organizations technological projects to create/provide insightful documentation/tools on better data governance practices, hence reducing data-related risks for a local tracking app and enhancing trust from partners towards data collecting / storing mechanisms for an online survey.

Project 2: Data trusts R&D and prototyping
- Led the R&D process among a group of 8 organizations on a Data trusts prototyping and sensitive data sharing.
- Organized 6 online interactive theoretical/practical workshops to discuss the potential of Data trusts and the challenges regarding inter-organization sensitive data sharing.
- Presented the work carried out to non-experts. Participated in the development of 4 guides/tools on Data Trusts setting up and data sharing.

Project 3: Automated survey analysis and results report
- Developed an automated Excel data analysis document taking directly inputs from publicly available surveys to analyse all possible answer combinations and generate up-to-date and read-to-send result reports, cutting survey analysis and response time by 99% and allowing easier data visualization.

Project 4: Organization's-wide culture and values review process
- Led and structured organization's-wide culture and values review process over a year through surveys, presentations, monthly discussions, and interactive workshops including all staff (CEO, management, and employees).

 Tech stack: Excel, Asana, Miro, Slack, Confluence, Mailchimp

Plan Nord (Quebec government), Quebec City, QC	**Jan 2021 – Jan 2022**

Infrastructure advisor

Project 1: New railroad construction feasibility study
- Acted as a liaison point between the government and the external stakeholders for a feasibility study on a new railroad construction project in a sensitive political context.
- Participated twice a month in steering committee meetings and wrote progress reports.

Project 2: Airport infrastructures upgrade in northern Quebec territory
- Contributed to the analysis of a funding request from a private actor for the renovation of northern airport infrastructures.
- Discussed with the applicant for project's clarification, made conclusions and recommendations to management on the funding request along with necessary justifications.

Project 3: Truck platooning technology pilot deployment
- Analyzed the automated truck platooning technology current state of knowledge and shared information and insights to management for better decision making / strategic discussions.
- Evaluated the potential funding for a truck platooning pilot project deployment as well as the potential benefits of such project for different actors directly or indirectly implicated.

Laval university, Remote (Quebec City, QC)   Jan 2020 – Jan 2021
Professional researcher in urban planning and decision aid tools

Development of a decision support tool to prioritize city's streets according to their potential to be redesigned
- Organized and led 9 workshops among a group of multidisciplinary professionals (+10) to structure an analysis logic based on their specific objectives, allowing the creation of a fully workable in-computer multi-criteria model of 9 criteria.
- Gathered, processed, and analyzed large GIS and non-GIS dataset using ArcGIS and other tools, producing the needed results to show which options (street segments) among the +4000 evaluated were the most logical for public investments based on attractivity score.
- Created well-designed +50 thematic maps to show data analysis results.
- Wrote the activity report (+100 pages), including context, methodology, limits and recommendations and a complementary report on the operations carried out in ArcGIS (+90 pages).

National Capital Commission of Canada (NCC), Ottawa, ON   May 2019 – Aug 2019
Planning and urbanism agent (intern)

Analysis of territorial development potential within the National Capital Region
- Analyzed the land use and development plan of 3 MRCs as well as the plans, regulations, policies, and urban planning programs of +10 municipalities located in the National Capital Region.
- Gathered, processed, and analyzed geospatial data using ArcGIS to design and create +15 thematic maps illustrating the results of the analyzes.
- Wrote the complete and final report (+90 pages) and presented final work in front of an NCC committee.

VOLUNTEERING ACTIVITIES

Montreal, Quebec, Canada   Feb 2022 – Sept 2022
Resource agent for new immigrants and refugees
- Helped new immigrants and refugees to learn French, Quebec culture and societal functions works (hospitals, school system, banks, government, etc.).

Antsirabe, Madagascar, Africa   May 2017 – Aug 2017
Member of the international cooperation project *Québec sans frontières* - Québec / Madagascar
- Helped on the integration of more eco-responsible practices in two educational centers and landscaped a new zone for cultures on the site of an educational center for young adults.
- Promoted international cooperation projects in Quebec and made various public presentations of the work done in Africa to encourage other young people to do the same.

Hilo, Hawaii, USA   July 2016 – Aug 2016
Volunteer on a tropical fruit farm
- Planted trees, grew and harvested tropical fruits on a small eco-farm in Hawaii.