

Alexandre

Cailhier

Full-stack web developer



On demand



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Montreal, Quebec, Canada

Open to relocate

Open to remote work



[linkedin/alexacai](https://www.linkedin.com/in/alexacai)



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



[portfolio/alexacai](#)

SUMMARY

- Bilingual (English & French – can also communicate in Spanish) Full-stack web developer with a professional background in data-based decision tools development. Experienced in consulting for technological project deployment, focusing on data governance / lifecycle.
- Currently working on building customized and responsive websites, web apps and mobile apps with in-demand technologies / tools and with a focus on delivering the best 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, JavaScript, CSS, Bootstrap, React, React Bootstrap, Recharts, Python, Django, Firebase, Node.js, Express, MongoDB, Heroku, Netlify, Jest, Puppeteer, Cucumber, GitHub, Excel, ArcGIS, Asana, Jira, WordPress, Confluence - **Basic:** React Native, TypeScript, Angular, Angular Material, PostgreSQL, MySQL, AWS, JSDoc, TypeDoc

EDUCATION / CODING PROJECTS

Certificate in Full-stack web development, Career Foundry

May 2023 – Feb 2024

Project: Recipe web app

- Built a responsive Django web app that enables users to create an account, browse, share, and comment on recipes, add recipes to their favorites, create private recipes, submit recipes for public display (with quality control filter) and more.
- This web app can be downloaded on desktops or mobiles, similar to a native app, and content is available to both signed-in and unsigned users (with less features for unsigned users).
- Pandas and Matplotlib have been used during development to display graphs based on users' search results.

Tech stack: Django, Python, JavaScript, HTML, CSS, Bootstrap, Pandas, Matplotlib, Heroku

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 web app (SPA), designed with state-based routing, several interface views to facilitate users CRUD operations, responsive design to be optimal on any device, and polished visuals for the best user experience.
- This app has extra features such as a search bar and a search modal with filters to help users find the next movie they would like to watch, and a profile page allowing them to create a list of favorite movies.

Tech stack: React, React Bootstrap, JavaScript, HTML, CSS, 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 is 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: JavaScript, Node.js, Express, MongoDB, Heroku, Postman

Other relevant projects (see portfolio):

- Command-line version of a recipe app built with **Python**
- Chat mobile app built with **React Native** and **Firebase**
- Movie web app built with **Angular**
- Pokedex web app built with **JavaScript** to data fetched from an **external public API**

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| 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

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| Open North, Remote (Montreal, QC) | Dec 2021 – Jun 2023 |
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Senior analyst in data and technology policies

*Open North is a small organization that specializes in open data, data governance, smart cities, and digital inclusion that provides different tools, guides and papers on data and technologies based on extensive researches, as well as support to governments/actors at all levels on digital topics.

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 Montreal organizations from various sectors, each with projects related to smart cities.
- Analyzed 2 organizations technological projects to create/provide insightful documentation/tools on better data governance practices, hence reducing data-related risks for a local transportation 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 pilot project.
- Organized 6 online theoretical/practical workshops to explore the potential of Data trusts and the challenges regarding inter-organization sensitive data sharing, using dynamic/interactive tools (such as Miro).
- Presented the work to non-experts. Participated in the development of 8 guides/tools on Data Trusts 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 analyze 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-wide culture and values review process

- Led and structured organization-wide culture and values review process over 1 year through surveys, presentations, monthly discussions, and interactive workshops including all staff (CEO, management, and employees).

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

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| Société du Plan Nord (Quebec government), Quebec City, QC | Jan 2021 – Dec 2021 |
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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: Airports infrastructures upgrade in northern Quebec territory

- Contributed to the analysis of funding requests from private actors for the renovation of 2 northern airports infrastructures.
- Discussed with applicants, made conclusions and recommendations to management on funding requests along with necessary justifications.

Project 3: Truck platooning technology pilot deployment

- Analyzed current automated truck platooning technologies/techniques and shared information and insights to management for better decision making / strategic discussions.
- Evaluated the potential funding for a truck platooning pilot project as well as the potential benefits of such project for different regional actors directly or indirectly implicated.

Laval University, Remote (Quebec City, QC)

Jan 2020 – Jan 2021

Professional researcher in urban planning and data-based decision support tools

Project: Development of a decision support tool to prioritize the city's streets according to their potential to be redeveloped

- Organized and led 9 physical/online workshops among a group of multidisciplinary professionals (+10) to structure an analysis logic based on their specific objectives, allowing the creation of a in-computer multi-criteria model of 9 criteria.
- Gathered, processed, and analyzed large GIS and non-GIS datasets 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 attractiveness score.
- Created well-designed +50 thematic maps to show data analysis results visually.
- Wrote the final 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 (Canada government), Ottawa, ON

May 2019 – Aug 2019

Planning and urbanism agent (intern)

Project: Territorial development potential analysis within the National Capital Region

- Analyzed land uses and development plans 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 to visually illustrate analysis results.
- Wrote the 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 agriculture 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 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.