

Bruno Pettersen-Coulombe

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My multi-faceted professional experience and my fast learning speed made me a professional with great adaptability. World record holder, author, coach: I'm a scientific mind in an athlete body. Addicted to caffeine and challenges.

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SKILLS

BACKEND	API REST, API SOAP, Java, Spring Boot, Javascript, Node.js, Express, Python, PHP
FRONTEND	React, JQuery, HTML
DEVOPS	Deployment optimisation, CI/CD, Jenkins, Docker, ELK Stack
DATABASES	Redis, NoSQL, SQL Server, Oracle, PostgreSQL, MariaDB/MySQL
SCRIPTING	Bash, Groovy, Powershell
SDET/QA	Gherkin, Rest Assured, Selenium, HtmlUnit, Mockito, Spock, JUnit, PHPUnit, Xray
TOOLS	Intellij, PyCharm, WebStorm, Visual Studio Code, Visual Studio, Eclipse, Git, Bitbucket, Jira, Maven, Gradle, Nexus, Swagger

EXPERIENCE

SDET Analyst Apr 2023 - Jun 2023

This mandate consisted of analyzing the efficiency of the team and proposing solutions to improve the speed of work. In particular, the potential gains of test automation was studied.

- Tested new AWS microservices to ensure compliance with legacy system
- Interviewed developers and testers to fully understand their tasks, challenges and slowdowns
- Analyzed bottlenecks, project context and automation costs
- Delivered a factual analysis on test automation relevance

SDET Technical Lead Aug 2022 - Mar 2023

Building a new testing framework from scratch for the Swift payment infrastructure.

- Reduced the number of lines of code by 85% compared to legacy framework
- Separated the test framework into several JAR deployed in Nexus: an API client for the main application (APS) and a payment injector to push payments in APS via Kafka Queues
- Refactored the code using Unirest, Lombok, Jackson, Provide Software libraries (Provide core and Provide ISO 2022), object inheritance, dependency injection, and Gherkin
- Implemented Fail-fast principle and detailed logs
- Trained 30 people within the SDET team via 7 presentations on the new test architecture

SDET Developer Mar 2022 - Jul 2022

Test automation for the Bankmate service, a Swift MT to MX(XML) format converter.

- Developed about 30 different tests to validate the behavior of Bankmate
- Revised existing Bankmate test code to eliminate code duplication
- Rewrote Bankmate legacy tests using Gherkin structure
- Assisted my colleagues on the technical side

QA Developer Oct 2020 - Feb 2022

Test automation for the ICOP application and microservices

- Upgraded the test velocity from 1 manual test/hour to 400 tests/hour
- Developed ~120 automated tests for the ICOP application using the Selenium library
- Developed ~60 automated tests for ICOP microservices (ISRPB/IIAPB/CAOPB) via Rest Assured

- Set up 4 Jenkins pipelines for the execution of the automated tests
 - Documented pipeline execution, code structure and maintenance guidance
 - Trained new employees on National Bank's Test Automation Framework
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DevOps Developer Jan 2019 - Sep 2020

Having worked on the production support as a Application support Analyst and automated a lot of things there, I was recruited as a DevOps Developer as a full time intern employee.

- Refactored the Eztops to GMI accounting service, with monitoring and automated alerts
 - Deployed and configured of an ELK-based monitoring solution for 2,000 Autosys processes
 - Developed Powershell scripts to communicate between APIs (Elasticsearch and Autosys)
 - Managed deployments
 - Writed dynamic documentation scripts (Do-nothing scripts) to improve bug investigation time
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Application Support Analyst Aug 2016 - Dec 2018

My first mandate after graduation to support several global finance applications. Lots of low-hanging fruits so having a development background, I took the opportunity to improve things.

- Reduced code/repos for financial reports production from 20 to 1 by developing a configurable, automated report producer using Groovy and Autosys scheduler
 - Configured and deployed a software and pod monitoring solution based on ELK
 - Planned the migration from the OnPrem Newtops to the Cloud based, modernized Eztops
 - Automated manual daily monitoring checks and alerts (by email)
 - Developed bash scripts to automate fixes for recurring operations failure
 - Supported production operations
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Developer Sep 2014 - Apr 2015

Constellio was a small business (growned and sold since) with a clientele that was mainly governmental. I built out a modular JavaScript web client for their flagship product.

- Deployed on the Government du Québec website, sucessfully handling 100,000 requests/day
 - Developed unit and integration tests for their product, using Mockito and JUnit
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Junior Developer Jan 2013 - May 2013

Implemented Entity framework on their subscription management software.

- First experience as a professional software developer
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Web Developer Apr 2014 - May 2014

Following a loss of code following a virus, Solutions Technologies contacted me to restore their tailor-made and configurable e-commerce shopping cart module for their various customers.

- Developed the backend of a modular e-commerce shopping cart based on Magento
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Web Developer Aug 2013 - Dec 2013

The small longboard manufacturing company asked me to create their portfolio website

- Applied learnings from GTI350-Design and evaluation of graphic user interfaces
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Web Developer Sep 2011 - Oct 2011

FJB casting needed a module for uploading and cropping photos of models for her bank of extras. The extras could then manage their images themselves on the Figuration Julie Breton website, a task that was cumbersome for the owner of the company.

- Integration of a cropping module and image upload in PHP/Javascript
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Web Developer May 2011 - May 2011

Heritage Software needed a drag-and-drop file upload module for their website.

- Integrated a file upload module in PHP/Javascript
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Web Developer Feb 2009 - May 2009

A graphic designer approached me after having accepted a mandate beyond his competence. The goal being to deliver a transactional photographs website. I was proud to have been able to deliver the mandate on time despite the end of the school semester and very tight schedule.

- Built a recursive algorithm to display available images on the website
 - Automated the production of image snippets with watermarks to display available images
 - Secured the full size images so that they were inaccessible to the public
 - Automated the payment via PayPal API
 - Automated email sending with attached full size images once payment was made
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Web Developer Jan 2010 - May 2010

First professional mandate (internship) which was an opportunity for me to gain experience in a direct relationship with various clients. I gained experience with both front-end and back-end.

- Redesigned a citizen news website based on Wordpress
- Built a custom CMS
- Designed a website for an elderly residence

EDUCATION

École de technologie supérieure

Jan 2014 - Aug 2016
Minor - Entrepreneurship

École de technologie supérieure

Sep 2010 - Aug 2016
Bachelor - Software Engineering

Cégep André-Laurendeau

Aug 2007 - May 2010
DEC - Computer Science

LANGUAGES

French

Native speaker

English

Full professional proficiency

Spanish

Elementary proficiency

INTERESTS

Racing

- Karting
 - Cycling
 - Speed Skating
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Coaching

REFERENCES

Bruno was very good at planning and implementing improvements based on real data. His pragmatism led to realistic goals, which led to measurable results. He is a great asset for any team leader that needs guidance and arguments that help to manage the project budget.

— Ali Boutaba, Team Manager, Société Générale

I'm thrilled to testify favorably on Mr. Pettersen's behalf. Bruno has been an active and invested participant in the entrepreneurship program, both in class and in the practical work where students are involved in influencing the content taught according to the needs of student entrepreneurs. Bruno demonstrated an interest in entrepreneurship that the whole class could benefit from during the discussions on different business scenarios. He also demonstrated an obvious curiosity towards the tools of entrepreneurship and a strong desire to master their operation. It is therefore with pleasure that I refer Mr. Pettersen to any company.

— Pierre Bélanger, Entrepreneurship Teacher, ÉTS

Bruno brilliantly overhauled the interface of the official search engine of the Government of Quebec during his internship at Constellio. The engine, which receives several million searches, had a flexible interface technology, but it was complex to integrate and limited response times. Bruno designed the new interface based on the latest generation technologies (Ajax/jQuery). The work done was a success! I would like to highlight the initiative, the concern for continuous improvement and the autonomy demonstrated by Bruno. It is a real pleasure to work with him!

— Nicolas Belisle, VP Technology, Constellio

Bruno was one of the brightest students I have had. He has great understanding of Financial Theory!

— Louis Parent, Finance Teacher, ÉTS