

Damien Beaufils

Senior Consultant & Software Crafter

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French, English

BACKGROUND

ABOUT

With more than 15 years of experience in software development, I started my own business after spending more than half of my career as an IT consultant in companies of different industries (banking, insurance, energy, utilities, media, sports...) and different sizes (from small companies to multinationals). I live in Quebec, and I speak English and French.

I am a full stack developer since the beginning of my career, and I have a major historical expertise in Java / Spring backend, framework for which I am certified (Spring Professional in 2020).

I was a consultant for almost 10 years, and in my last experience before my entrepreneurial leap, I was CTO of an IT consulting company for more than 3 years, in parallel to my role as a software developer and senior consultant.

Designing quality software is my passion, and I like to be proud of the work done. In addition to my mandates, I spend a lot of time constantly training myself to stay on top of the latest technology, in order to be able to provide the best solutions to your various challenges.

I am an expert in the quality of development practices, also called Software Craftsmanship practices (practices such as Clean Code, Refactoring, Test Driven Development...) and I am certified on several technologies as well as on the eco-design of digital services (GreenIT).

I also had the opportunity to be a speaker in famous technical conferences such as Devoxx in France or Web À Québec.

I like to develop scalable and maintainable software in a team, and to share this know-how with others. I like to work with inclusive and caring teams, who also practice these software development techniques, or who wish to progress on them.

Freelance Senior Consultant, Conseil Logiciel & Web (CLWeb) Charlevoix

Jan, 2023 - Present

Execution of software and web development mandates, consulting mandates, training mandates and CTO-as-a-Service mandates

Architecture and technical framing consultant, KPI Digital

Sep, 2022 - Oct, 2022 1 month

Conducted a technical framing of a frontend application for a strategic project

- Design and conduct workshops to collect and aggregate data on the existing technical architecture, on the overall information system, and on the delivery process
- Provide recommendations on tools, technologies, frameworks, architecture, automation, quality practices (including testing) and security practices
- Technical framing performed in parallel with functional, product and UX/UI framing
- Creation of a report in the form of slides containing all the observations and recommendations, and presentation to the CEO and all the stakeholders

CTO coach, Arthur Intelligence

Apr, 2022 - Jul, 2022 3 months

Accompaniment and coaching of a startup's CTO

- IS and technical architecture review with the CTO
- Code review on critical application modules
- Audit of the production process (analysis, development, quality tests, deployment) and formulation of recommendations
- Making recommendations on hiring staff or service providers

Craft Auditor, BNP Paribas

Jan, 2022 - Apr, 2022 3 months

Conducted a technical audit on the development quality practices of 4 teams spread across India and North America

- Technical audit carried out through interviews with key members in each team, and by conducting a survey analyzing the maturity of each team through 5 main areas: Testing strategy and practices,
 Collective code ownership, Code quality & Technical debt management, Architecture and design practices, DevOps practices
- Analysis of results and formulation of recommendations based on DORA Accelerate practices
- Automated generation of Excel reports incorporating metrics and graphs, based on survey results, to easily observe the trend between two measurement points
- Technical audit performed in parallel with other audits on agile and product practices, as part of an overall agile transformation process

Senior Software Developer & Software Craftsmanship Coach, Intact Insurance

May, 2020 - Aug, 2021 1 year 3 months

Realization of a frontend + backend web application allowing to analyze the market value of a vehicle in case of total loss. The market value is determined by the user via an automated search and selection of similar vehicles displayed on platforms such as Kijiji or Autotrader.

Technical environment: Java 11, Spring Boot, Angular 11, TypeScript, JUnit, Mockito, Maven, Jenkins, Git, OpenShift, Gosu, IntelliJ IDEA, Windows

- Team of 5 developers
- Development of features in a 2-week iterative cycle
- Training and coaching of the development team in quality practices such as Clean Code, Test Driven
 Development, Refactoring of legacy code and Peer Programming
- Training and support for the development team on Java, Spring Boot and TypeScript
- Biweekly Code Kata animation
- Technical debt monitoring and management
- Production monitoring

Craft Auditor, Lightspeed HQ

Feb, 2020 - May, 2020 3 months

Conducted a technical audit on the development quality practices of more than 12 teams across Canada and Europe

- Technical audit carried out through interviews with key members of each team, and through a survey sent to more than 200 people analyzing the maturity of each team through 5 main axes: Testing strategy and practices, Collective code ownership, Code quality & Technical debt management, Architecture and design practices and CI/CD practices
- Technical audit performed in parallel with other audits on agile and product practices, as part of an overall agile transformation process
- Presentation of the audit to the Chief Product Officer, the VP of Product Management and to the managers of each audited team

Tech Lead, Genium 360

Sep, 2019 - Feb, 2020 5 months

Development of an MVP for a new career platform specialized in the publication and search of job offers for engineers from Quebec, with the following goals: :

- for companies recruiting engineers from Quebec: to put job offers online and to do employer branding in order to have a more efficient recruitment,
- o for engineers who are members of the Ordre des Ingénieurs du Québec: to apply for these jobs and also to have automated recommendations based on their profile and resume,
- for Genium360: to provide headhunting services for companies that do not have enough time or technical/HR capacity.

Technical environment: TypeScript, Nuxt.js, NestJS, Server Side Rendering (SSR), Jest, Git, Gitlab CI, Clever Cloud, PostgreSQL, WebStorm, Linux

- Conducting the technical framing
- Design and implementation of the technical architecture
- Development of features in a 2-week iterative cycle
- o Implementation of continuous integration and deployment
- Software Craftsmanship practices applied from day one (TDD, Clean Code, Code Review, Pairprogramming, Clean Architecture)

Senior Software Developer & Software Craftsmanship Coach, Intact Insurance

Mar, 2019 - Aug, 2019 5 months

Web services platform allowing to declare a car claim by web or mobile application

Technical environment: Java 8, Spring Boot, Hibernate, Liquibase, JUnit, Mockito, Maven, Jenkins, Git, OpenShift, IBM MQ, Gosu, SQL Server, IntelliJ IDEA, Windows

- 24/7 architecture to abstract from the technical and functional complexity of the legacy claims management system
- o Architecture designed for a peak of 13,000 claims in 6 hours in the event of an environmental disaster
- Team of 6 developers
- Development of features in a 2-week iterative cycle
- Training and coaching of the development team in quality practices such as Clean Code, Test Driven
 Development, Refactoring of legacy code and Pair-programming
- Training and coaching of the development team on Java and Spring Boot
- Technical debt monitoring and management
- Production monitoring

Senior Software Developer, Agence Tink

Nov, 2018 - Feb, 2019 3 months

Work on the Foodbasics and Super-C mobile applications, the Metro.ca website and the Monetico.ca website.

Technical environment: Java 8, Spring Boot, Spring Batch, Hibernate, Liquibase, JUnit, Mockito, Maven, JavaScript, Jenkins, Git, SQL Server, IntelliJ IDEA, Windows

- Backend technical migration
- Design and development of an import module and new APIs for the management of mass coupons on cell phones
- Design and development of loyalty card generation for existing and future customers
- Refactoring of legacy code and implementation of automated tests on existing critical features
- o Corrective and evolutionary maintenance of the website
- Participation in the development of the bookmark management feature
- Application profiling to determine and correct excessive resource consumption
- Technical migration of a technical module from SOAP to REST

CTO & Senior Consultant, Zenika Canada

Nov, 2018 - Dec, 2022 4 years 2 months

CTO of Zenika's Canadian branch, and senior consultant for delivery, training and consulting mandates. Main mandates listed above, completed between November 2018 and December 2022, alongside my role as CTO. My mission as CTO:

- Collaboration with sales department: help to answer requests for proposal, meet clients, be the ambassador of Zenika's technical expertise to our clients
- Collaboration with HR/Recruitment department: assist with hiring, conduct technical interviews
- Agency steering: define and monitor the CTO budget per year, participate in decision making
- Career coach for the agency's consultants: follow their evolution and help them in their progression, accompany the most junior consultants in an extended way, assist them in passing a certification or a training
- External visibility (meetups, conferences)

Tech Lead, Internationaux de France de Tennis - Roland-Garros

Sep, 2017 - Sep, 2018 1 year

Site providing information about the French Open Grand Slam tournament, players, matches, tables and statistics. Display of the live score for all the matches in progress during the tournament. Site with high availability and performance issues in an event context.

Technical environment: Java 8, Spring Boot 2, Hibernate, Liquibase, JUnit, Mockito, Gradle, JavaScript, Nuxt.js, Jest, Server Side Rendering (SSR), Jenkins, Git, Docker, OpenShift, MySQL, Prismic.io, IntelliJ IDEA, Linux

- o 35 million unique visitors during the 3 weeks of the 2018 tournament (approximately 4 billion cumulative queries)
- Peak of 300 000 simultaneous visitors on the site (with a maximum of 5500 requests per second)
- Use of a Headless CMS (Prismic.io)
- Agile development (Scrum & Kanban)
- Team of 4 developers
- Conducting the technical framing
- Development of features in a 2-week iterative cycle
- Coaching and support of the development team
- Responsible for the technical quality of the product and the maintainability of the code towards the customer
- Software Craftsmanship practices applied from day one (TDD, Clean Code, Code Review, Pairprogramming, Mob-programming, Clean Architecture)
- Production and incident monitoring during the tournament

Tech Lead, Oodrive

Apr, 2017 - Jun, 2017 2 months

Web application allowing CAC 40 companies to keep insider lists. Complies with the European Market Abuse Regulation (MAR). Data export possible for auditing by the Autorité des Marchés Financiers (AMF).

Technical environment: Java 8, Spring Boot, Hibernate, Liquibase, JUnit, Mockito, Gradle, TypeScript, Angular 4, Jasmine, Git, GitLab CI, Heroku, PostgreSQL, IntelliJ IDEA, Linux

- o Encryption of sensitive data
- Agile development (Scrum & Kanban)
- Team of 3 developers
- Conducting the technical framing
- Development of features in a 2-week iterative cycle
- Coaching and training of juniors

Tech Lead, Direction de l'Information Légale et Administrative française

Feb, 2016 - Feb, 2017 1 year

Official website of the French administration. Consultation of information sheets intended for French citizens. Realization of online procedures (change of address, creation of association, registration on the electoral lists....).

Technical environment: Java 8, Spring (Core, MVC, Data JPA, Security), Hibernate, Liquibase, JUnit, Mockito, Maven, JavaScript, Jasmine, Git, Jenkins, LXC, Tomcat, Ansible, PostgreSQL, HSM cryptographic box, IntelliJ IDEA, Linux

- High stakes for personal data security
- High availability stakes in the context of the French presidential elections in 2017
- Average of 50,000 online submissions per day (peaking at 75 submissions per minute) in the days leading up to the close of voter registration
- Agile development (Scrum & Kanban)
- Team of 11 developers
- Development of features in a 2-week iterative cycle
- Coaching and training of the team in practices such as TDD, Clean Code, code review, peerprogramming, mob-programming
- Technical debt monitoring and management
- Software quality progress indicators monitoring
- Mentoring of team members via bi-weekly one-on-ones
- Training of an internal Tech Lead

Senior Software Developer, Internationaux de France de Tennis - Roland-Garros

Jun, 2015 - Feb, 2016 8 months

Online ticketing sales front-end for the French Open Grand Slam tournament. Website with information about the tournament, seats, courts, offers and prices. Sales tunnel for the purchase of tickets. After-sales service, printing of tickets in PDF, online resale.

Technical environment: Java 8, Play Framework, Hibernate, Liquibase, Apache CXF, JUnit, Mockito, Sbt, JavaScript, Backbone, Jasmine, Git, Jenkins, Docker, MySQL, Prismic.io, IntelliJ IDEA, Linux

- Strong performance and availability issues during the sales opening period
- Peak of 100 orders per minute during the opening of sales to the general public
- Use of a Headless CMS (Prismic.io)
- Agile development (Scrum & Kanban)
- Team of 5 developers
- Development of features in a 2-week iterative cycle
- Coaching of the development team on Software Craftsmanship practices
- o Development of several Single Page Applications (SPA), including the sales tunnel, with Backbone
- Development of specific connectors with Play Framework Java to interface with historical systems (in SOAP)

Software Craftsmanship trainer and coach, AXA Assurances

Feb, 2015 - Sep, 2015 7 months

Coaching of software development teams

- o Coaching of the Software Craftsmanship internal community of practice facilitator
- Coaching of Tech Leads in the implementation and dissemination of practices in their teams (TDD, BDD, Clean Code, code review, refactoring of legacy code)
- Conducting training on Test Driven Development (TDD)

Teacher, École d'ingénieur en informatique EPITA

Sep, 2014 - Sep, 2016 2 years

Introduction classes to Scrum and Kanban agile methods for students in their 2nd year of engineering studies (equivalent to 1st year of Master's degree)

Software developer, Canal+ International

Jun, 2013 - Mar, 2015 1 year 9 months

Management of the broadcasting of Live TV, VoD and satellite content internationally.

Technical environment: Java 7, Groovy, Grails, Spring (Core, MVC, Batch, Integration), Hibernate, JUnit, Mockito, Maven, FitNesse, Git, Jenkins, Tomcat, MySQL, IntelliJ IDEA, Linux

- 25 applications for 800,000 lines of code
- Agile development (Scrum & Kanban)
- Maintenance in operational condition of the IS
- Feature development in a 2-week iterative cycle
- Management of the virtualized test environment
- Management of continuous integration and delivery processes
- Technical debt management

Main mandates listed above, completed between June 2013 and September 2018. Co-leader and member of the Software Craftsmanship tribe

Software developer, Agence Backelite

Jan, 2011 - May, 2013 2 years 4 months

Technical leader on Java and HTML5/JavaScript/CSS3 technologies. Development of websites and mobile web applications for: Groupama Assurances, Bank Crédit Agricole, Cell phone operator SFR (Bell equivalent), Voyages-SNCF and TGV-Europe (VIA Rail equivalent), Cetelem Assurances, Pôle-Emploi.

Technical environment: Java 7, Spring (Core, MVC), Hibernate, Apache CXF, Stripes, Tiles, Maven, Jenkins, JavaScript, Sencha Touch, jQuery Mobile, Tomcat, Jetty, MySQL, Eclipse STS, Linux

Software developer, Institut d'Astrophysique Spatiale - CNRS

Apr, 2010 - Dec, 2010 9 months

Maintenance and evolution of the CoRoT satellite spatial data management and access system. Development of RESTful web services dedicated to scientific data sharing between research laboratories.

Technical environment: Java 6, Restlet, Spring Core, SITools, FITS, Tomcat, MySQL, Eclipse STS, Linux

Teacher, Université Paris-Sud 11

Nov, 2008 - Mar, 2010 1 year 4 months

Development courses in C++ and Java for students in Computer Science License (equivalent to specialized Baccalaureate)

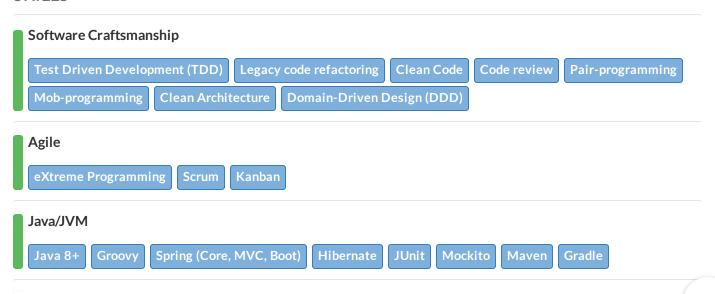
Software developer, Banque privée Crédit Agricole

Sep, 2006 - Sep, 2008 2 years

Development of internal software for the Human Resources department and for the calculation of the Net Banking Income (NBI). Administration and maintenance of the purchasing system for IT services and the intranet site for managing telecom invoices.

Technical environment: C#, VB.Net, PHP, MySQL, Visual Studio, Windows

SKILLS





EDUCATION

Computer Science and Information Technology, Master of Science, SUPINFO

Sep, 2008 - Sep, 2010

Information Technology and System administration, Bachelor, Université Paris-Sud

Sep, 2007 - Sep, 2008

Software Engineering, Bachelor, Institut Universitaire de Technologie (I.U.T.) d'Orsay

Sep, 2005 - Sep, 2007

CERTIFICATES

Certified Kubernetes Application Developer (CKAD), The Linux Foundation

Issued on: Dec 09, 2021

Écoconception de service numérique, GreenIT.fr

Issued on: Nov 19, 2021

Spring Professional, VMware

Issued on: Nov 16, 2020

VOLUNTEER WORK

Software developer, Espace Public Numérique du Centre Social Relais 59

Jan. 2014 - Jan. 2015

Development of a web application "Pointing Device". Allows to clock the users of computers available in free access and to manage the registration of new users.

Développeur, Boulangerie Le Panivore

Apr, 2020 - Apr, 2022

Development of an online ordering website and a backoffice for order tracking, stock calculation and availability

PUBLICATIONS

La couverture de code, un indicateur melon d'eau?, Web À Québec 2022

Published on: May 22, 2022

Un melon d'eau, c'est vert à l'extérieur et rouge à l'intérieur. La couverture de code par les tests, ça peut être la même chose : on a un beau score élevé de couverture, mais on a toujours des défauts déployés régulièrement en production malgré tout.

En bref, un faux sentiment de sécurité de l'extérieur, et quand on creuse, on a à l'intérieur des tests automatisés qui ne vérifient pas assez de choses concrètement.

Dans cette conférence, je vous expliquerai en quoi la couverture de code est un indicateur de non-qualité et que des outils comme les tests de mutation peuvent mesurer l'efficacité réelle des tests, afin de produire une métrique fiable sur la qualité et la pertinence de vos tests automatisés.

To DRY or not to DRY?, Fluent C++

Published on: Nov 13, 2018

A blog post about DRY (Don't Repeat Yourself) principle and when not to apply it.

Guide anti-frustration pour navigation en projet trouble, Touraine Tech 2018

Published on: Feb 23, 2018

Bien souvent, des projets démarrent dans le brouillard et le chaos. Qu'ils soient en agile ou non. Et bien trop souvent, une purée de pois vous accompagne tout le long du projet et vous emmène droit dans le mur, sans que vous le sachiez. Les victimes : vous, et votre client.

Dans ce retour d'expérience, nous vous partagerons comment allumer des feux anti-brouillards. Concrètement, des pratiques facilement actionnables pour vous, votre équipe et votre client, afin d'améliorer les conditions de réalisation et de pilotage de vos futurs projets.

Nous évoquerons des sujets tels que le mob programming, les tracer bullet ou la rétrospective technique, qui vous permettront de transformer ce mur en petits obstacles franchissables.

Café Craft podcast #15 : Renverser la pyramide des tests!, Thomas Wickham

Published on: Jan 01, 2018

« Tests unitaires, tests d'intégration, tests fonctionnels. Tous sont utiles, mais chacun a un usage... Comment assurer une répartition optimale de chaque "couche" de tests ? Sur quelles bases ? Damien Beaufils nous explique tout. »

Parole d'expert : Le rôle de Tech lead selon Damien Beaufils , OpenClassrooms

Published on: Nov 21, 2017

« Pour la sortie de notre Parcours Tech lead, nous avons rencontré Damien Beaufils, développeur et consultant chez OCTO Technology. Damien occupe aussi notamment le rôle de Tech lead sur des projets de développement.

Nous avons posé à Damien des questions pour vous aider à mieux voir ce qu'est, en pratique, le rôle de Tech lead : comment on s'y forme, quels en sont ses avantages et inconvénients, ses missions principales et ses responsabilités. »

Comment être Tech Lead dans une pizza team XXL sans finir sous l'eau?, Devoxx France 2017

Published on: Apr 07, 2017

Être Tech Lead, c'est être au service de l'équipe en étant à la fois formateur, facilitateur, expert et coach. Mais quand l'équipe projet est composée de plus de 15 personnes, dont 10 développeur euse s, comment remplir c rôle tout en continuant à prendre le temps de développer avec l'équipe, et ce sans finir sous l'eau?

Dans cette conférence, je vous partagerai un retour d'expérience d'1 an dans le rôle du Tech Lead d'une équipe de développement travaillant sur un site web grand public. Cette équipe de 10 développeur euse s'était mixte à plusieurs titres : multi-compétences, homme/femme mais également client/prestataire.

Après une présentation générale des différentes facettes du Tech Lead, je vous détaillerai les pratiques et mesures qui ont été mises en place pour améliorer la propriété collective du code et la qualité du produit au quotidien. Je vous partagerai également les succès qui ont favorisés l'apprentissage, la progression et l'autonomie de l'équipe (sans avoir à être un super-héros ou un dictateur), mais aussi les problèmes rencontrés et ce qui a moins bien fonctionné.

Petit-déjeuner « Secteur public : REX du site service-public.fr », OCTO Technology

Published on: Dec 13, 2016

Depuis 2015, la DILA accompagnée par OCTO Technology, s'est lancée dans la refonte du site officiel de l'administration française, le portail unique de renseignement administratif et d'accès aux services en ligne. Ce projet s'inscrit dans un programme global de simplification de l'offre d'information administrative et de développement de nouveaux services de relation à l'usager.

9 mois plus tard, Service-Public.fr est entièrement neuf et reste le site majeur de l'administration. Depuis, il intègre en continu de nouveaux services de qualité au rythme des mises en production toutes les 2 semaines.

À l'occasion de ce petit-déjeuner, les actrices et les acteurs du projet service-public.fr (DILA et OCTO) vous proposent un retour d'expérience très concret sur 6 points clés :

- 1. Le pilotage d'un projet agile à travers les différentes phases du projet. Présenté par Frédéric Burel & Maxence Modelin
- 2. Les usagers au coeur de la conception de service-public.fr. Présenté par Flavien Testevuide & Géraldine Da Sylva
- 3. Animer une large équipe fonctionnelle dans un projet agile. Présenté par Katia Sonntag & Nicolas Fournier
- 4. Les pratiques au quotidien pour assurer la propriété collective du code applicatif ainsi que la qualité du produit.
 - Présenté par Stéphane Colle & Damien Beaufils
- 5. Principes clés DevOps à mettre en place pour déployer sereinement en production toutes les 2 semaines. Présenté par Alexandre Otparlic & Tanguy Patte
- 6. Intégrer nativement les normes d'accessibilité dans le processus de construction du produit. Présenté par Anne Cavalier & Adrien Saunier

Développement artisanal d'un logiciel en 20 itérations, Paris Web 2016

Published on: Sep 30, 2016

Retour d'expérience d'un projet de refonte d'une billetterie en ligne sur dix mois. L'enjeu attendu était les performances du back-end pour tenir la charge lors de l'ouverture des ventes. L'enjeu réel a été de maintenir la base de code aussi bien back-end que front-end au fil des itérations.

Une équipe composée d'un Tech Lead et de quatre développeurs a réussi à livrer un produit maintenable en plus d'être bien conçu.

Après une brève présentation de l'architecture et des technologies utilisées, nous vous présenterons la méthodologie mise en place de l'itération 0 à l'itération 20. Nous vous expliquerons en quoi Software Craftsmanship est une extension naturelle des méthodologies agiles, et ce que les pratiques ont apporté à l'équipe de développement, au métier et à la DSI.

Developer's Journey podcast #16, Timothée Bourguignon

Published on: Jun 07, 2016

« In this episode, I talked to Damien Beaufils, a french software craftsman working in Paris. Damien shared the experience he made on his current project; how he helped his team focus on quality to improve the whole software. We talked about the different kind of tests, the test pyramid and Damien even shared a very good recipe on how to improve test quality in a legacy or project lacking tests. »

Web Services for IAS CoRoT archives , Institut d'Astrophysique Spatiale, for the 2nd CoRoT Symposium Published on: Jun 01, 2011

IAS is the official archive repository for the CoRoT mission data. In addition of data archiving in a secure way, IAS proposes several interfaces corresponding to different level of data and different kind of users. We present here the recent changes made aiming at improving our interfaces with real added-value services related to the available data. In particular, we provide a set of web services which permit to give access to additional informations on a given target such as online lightcurve plotting or periodogram computing and plotting. In addition, future developments are outlined.

REFERENCES

Julien Tellier

We worked together with Damien on the overhaul of the ticketing system and the official website of Roland Garros.

During these two years of collaboration on the architecture and development phases, I had the pleasure of working with a colleague who was committed to building quality solutions, particularly through Software Craftsman practices.

Damien is also an expert in the tools he uses on a daily basis and knows how to take on the unknown with confidence and wisdom.

At the same time, he is not a hero you have to depend on, as he is a born leader who loves to share everything he knows and will have the patience and listening skills to guide the whole team. He taught me TDD, which I used to find counter-intuitive; today I would not do it any other way.

His kindness and assertiveness allow him to convey the strongest messages to all audiences and to create a space where everyone can express themselves and contribute.

Pierre Trollé

I had the opportunity to work with Damien for 8 months (from May to December 2016) on the Service-Public.fr project.

Damien was the TechLead of the development team composed of Octos and internal developers at DILA (a team of about ten people) of which I was part.

What I particularly liked about Damien:

His attitude as a TechLead

His exemplary way of leading a rather heterogeneous team and getting the best out of it

His inspiration that allows us all to progress

His advice, relevant feedback and encouragement

His explanations on the project architecture, on the project and on the Java environment

His involvement in the project

His contribution to the TechLead role, through the O3 projects

His good mood