

MAIN SKILLS

Tech leadership & innovation projects (CTO)

Medias & TV, web, e-commerce, mobility, start-up & scale-up (tech, business, challenges)
Architecture and solutions design, management of techs, deployment, operations
Experts team build-up and mentoring, transformation management, skills development
Stakeholder support, reporting, technology evangelism

Web architecture & pragmatic change management

Defining infrastructure guidelines and urbanization
Support to implementing teams (hands-on expertise and mentoring)
Micro-service and RESTful API patterns, containers (Docker), API-First architectures
Virtualization and move-to-cloud

Technical expertise

Software factory automation (CI/CD), DevOps process with Kubernetes and GitOps
High-traffic hosting platforms (VoD, e-commerce, information medias)
IoT ecosystem, smart home, embedded dev (ESP32, Arduino, MQTT...)
Network architecture L2-L7, VLAN 802.1q, load balancing
HTML/CSS, Git, RubyOnRails, Debian, MariaDB, MongoDB, Apache/Nginx, RabbitMQ

WORK EXPERIENCE



2021 · 1 year
Full remote (Paris)

Principal Engineer / Head of architecture

Free2move

Scale-up | Kubernetes | Gitops | Micro-services | NodeJS | CI/CD | Management | Mobility

Principal Engineer - tech expertise and leadership

- Lead software transformation to microservices (split the NodeJS monolith)
- Define and build target cloud architecture (AWS, Kubernetes, CI/CD, GitOps)
- Education around 12-factor principles, devops advocate, best practices
- Manager of the Mobility Framework team (6 senior engineers)
 - Team created from scratch to handle the change management
 - Senior skilled engineers - software architecture (dev), cloud architecture (ops), change and projects support
 - Cross-teams coordination, tech stack evolutions, support



2020 · 4 months
Paris (France)

Lead Software Architect

Ontex Digital Factory

e-commerce | API first | Micro-services | Health Care | PHP/Symfony

Defined the next e-commerce subscription platform

- Led microservices architecture as foundations for business ambitions
- Contributed to an innovative IoT project (hygiene area)



2017 · 2.5 years
Paris (France)

Solutions Architect - Digital BU

FDJ Française des Jeux

Digital transformation | Micro-services | CI/CD | PHP | MariaDB | NodeJS | MongoDB | Docker

Supervised and guided development teams

- Monitored tech-lead developers with weekly workshops
- Organized and presented several internal talks - projects feedback, RabbitMQ messaging...
- In charge of projects architecture definition for day-to-day projects

Defined the target micro-services architecture

- Defined and executed the migration to REST and micro-services patterns
- Raised management and other teams awareness to state-of-the-art patterns
- Handled tech choices, data modeling, execution along with teams

Set up continuous integration and deployment (CI/CD) using Docker

- Containerization with Docker and automated pipelines for projects
- Provided guidance and skills development for Q/A and production teams

Bootstrapped and led reference teams on NodeJS/MongoDB + lean management

- Introduced the first NodeJS and MongoDB stack company-wide
- Implemented full automatization of the development process (build, test, deploy)
- Obtained strong involvement of developers, testers, business experts and quality teams



2016 · 1 year
Paris (France)

Re-platforming architect to micro-services

RueDuCommerce

E-commerce | Replatforming | Micro-services | CI/CD | PHP | Docker

Refined the transformation trajectory of the IT department and led the movement

- Sensibilisation de la Direction par la cartographie et l'illustration des principes d'architecture
- Mentorat des tech-leads et évangelisation permanente (ateliers hebdomadaires)
- Diverses présentations effectuées (retours d'expérience, messaging temps-réel sur RabbitMQ, ...)

Automated and implemented CI/CD practices (on containers and private cloud)

- Conversion des équipes à la production d'images Docker pour la production
- Backend-for-frontend pour les fronts - agrégation de services et séparation data/vue

Developed technical models for the new architecture

- Développement de micro-services modèles pour l'exemple (Ruby, Sinatra, MongoDB)
- Intégration des concepts dans les développements existants pour obtenir une démonstration concrète



Bruno Medici

CTO / VP Eng
Co-founder
Web architect

Freelancing | permanent

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in [brunomedici](https://brunomedici.com)

🔗 github.com/bmedici

🌐 bmconseil.com

EDUCATION

Engineering Master Degree (IMT
Lille-Douai, ex ENIC)

Mobile communications
Marketing of technology

International conferences

Elixir Conf 2021 Varsaw
Rails Conf 2010 Baltimore
Rails Conf 2009 Las Vegas
Rails Conf 2007 Berlin
Paris On Rails 2007 Paris
PHP Conf 2004 Amsterdam
PHP Conf 2002 Munich

Training and workshops

GCP Fundamentals & Architecting
Cisco PIX Firewall Advanced
PSC1 civil emergency prevention

DUT Networks & Telecoms

IUT Sophia-Antipolis (2000)

Bac S (Techno indus)

School diploma in Sciences

INTERNATIONAL

Mobility

France, English-speaking countries,
rest of world

French

Mother tongue

English

Pro proficiency (TOEIC 920)

Italian

Basic (father tongue)

INTERESTS

Scuba diving

N2 PA40/PE60

TDI Deep-diver, Nitrox



2014 · 4 years
Paris (France)

Architect - VoD platform re-engineering

FranceTV Numérique

Media & broadcast | Replatforming | Micro-services | VoD | Push messaging | High traffic | CDN delivery

Built the new replay platform handling all the contents (18-months project, several experts)

- Defined a new REST-API and micro-services-based architecture, orchestrated by our in-house scheduler
- Studied and rationalized VoD business workflows, defined APIs, coached development teams (PHP/Symfony2)
- Iterated over specifications, development, aiming to continuous deployment)

Successful production since Q2 2015, fully operational 300+ programs per day

Initiated and build the "rest-ftp-daemon" open source micro-service project

Initiated the global messaging system for realtime notifications (AMQP)

- Connecting each platform of the Group (Pluzz, CultureBox, FranceTV Info/Sports/Education...)
- Interacted with commercial partners (Molotov.tv, Orange...)

Led strategic collaboration on several projects across the Group

- Defined architecture workframe for Zoom (on-demand recommendation of content)
- Managed architecture for the cross-products tagging system
- Connected TV services upgrades, overhaul of the platform for channels websites



2013 · 6 months
Paris (France)

Hosting specialist - change management

Société Générale

Banking | Project coordination | Platform access security | DenyAll rWeb | ActivNetwork

Re-integrated the Crédit du Nord branch activity (integration and maintenance perimeters L2/L3)

- Studied convergence of Crédit du Nord and Société Générale solutions and technologies

Acquired leadership for ongoing integration projects, helped takeover for L2 and L3 support teams

Successfully built a cooperating ecosystem between legacy teams and new teams

- Transferred knowledge and documentation to each team on Société Générale side



2012 · 3 months
Réau (France)

Consulting architect - network and security

SAFRAN / SNECMA

Defence security | 50k+ users | Cisco | Bluecoat

Took over skills and responsibility of network security from SNECMA branch to headquarters

- Explored perimeter, methods and potential risks
- Reverse engineering and back-documentation of main topics
- Consolidation de diverses plateformes multi-sites

Brought internet expertise (email, DNS, network security and web filtering)



2011 · 1.5 years
Paris (France)

Architect - Video/VoD platform re-engineering

CANAL+

Media & broadcast | Architecture | Business workflows | R&D | Transcoding | Storage | Delivery

Urbanized multiple video-on-demand platforms for the Group, defined the target architecture

- Proposed architecture rationalization for offers like CanalSat, Canal+, CanalPlay Infinity and replay-tv (encoders, media provisioning)

- Described and modelled business processes for the entire VoD production stack, wrote technical specifications basis

- Introduced micro-services and APIs (ingest, transcoding, file provisioning, monitoring)

Led the call for bids for the workflow engine function

- Coordinated RFI and RFP with 12 international media providers (documents writtendin English)

- Organized proofs-of-concept for the top5, project in close cooperation with CTOs and top management

Managed the storage restructuring project within Diffusion branch (above 1 PB of data)

- Made technical recommendations for transcoding storage, distribution and long-term archives
- Led the project team, defined specifications, horizontal and vertical scalability



2010 · 1 year
Lille (France)

Internet and security architect

Crédit du Nord, Société Générale

Banking | Platform architecture | High traffic | IP networking

Practiced technical architecture and evolutions of Customers Internet platforms

- Worked with several firewall, reverse proxies, load balancers, IPS, Redhat/OpenBSD

- Used HTTP expertise, caching, filtering, L7 routing through Apache mod_rewrite

- Introduced methods and tools for configuration versionning and deployment

Defined hosting architecture for Mobile Internet services (customers of 7 branches/banks)

- Implemented mobile-specific caching, protocols and compression
- Revived staging platform to allow better testing and team work (same as production)



2009 · 6 months
Paris (France)

Architected onboard platform for TGV trains

SNCF/BOLLORE

Audit | Architecture | Embedded service portal | Rail industry | Ruby on rails | PHP

Defined and built a service platform with internet access, aboard of TGV-Est trains

- Audited the technical architecture proposed by the consortium Orange, Cap Gemini, Alstom, Eutelsat

- Recommended updates and improvements leading to new commercial opportunities

- Participated in the founding of the joint venture between Bolloré-SNCF, key public project

Defined technical functional architecture for onboard and ground-train link

- Directed development of embedded-specific interfaces



2008 · 1 month
Paris (France)

Audit and content-delivery providers selection

FRANCE 24

Media & broadcast | High traffic platform | CDN delivery | Akamai | Drupal

Audited coupling between business-critical systems and content-delivery providers

hosting architecture optimization recommendations (Special Technical specs)



2008 · 3 months
Reims (France)

Information system architect

Reims & Chaumont Hospitals

Healthcare | Personal data security | National repository | Ruby on Rails | PKI

Set up a system federating data for several hospitals, case study and recommendation of a

technical architecture, security expertise, workflow

Helped project office, requests for bid, facilitated developments

Private aviation

Ultra-light 3-axis pilot (BB), Private pilot license ongoing (LAPL/PPL)

Smart Home & IoT

Automation, connected objects based on Arduino/ESP8266/ESP32

RubyOnRails

Development, R&D, several hosted services

LilleSansFil

Non-profit, president (2005)
Open metropolitan network (wifi), press and institutions relations
Embedded systems, mesh radio networking

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2007 · 6 months
Paris (France)

Web and medias strategy consultant

FRANCE 24

Media & broadcast Project management CDN delivery Video streaming Opensource

Lead the 2007 coverage of the French presidential election on the web

- Animated the dedicated team -(moderators, translators, 20 international bloggers)
- Experimentation of the media convergence (broadcaster, internet and television audience)
- Live video streaming, realtime voting results, internet visitors reactions, SMS-number offering interaction to the audience, 5 webcams in the newsrooms (98k+ visitors for both ballots)

Provided strategic support for the IT department

- Strengthened the image of France24 in the world, and on the blogosphere
- Built the team and the methods around the required technical skills
- Implemented various projects thereafter, within the channel's teams (Cannes Festival, general elections)

Conducted and wrote the request for bid for the new web infrastructure



2001 · 5 years
Lille (France)

Co-founder and CTO of Itool Systems

Itool Systems, SaaS editor

Co-founder Finance & accounting Pure-player Innovation Business award Management

Associate and co-founder, board member

- Itool Systems creates and sells online business solutions for SMC and Professional Accountants
- Launched portal itool.net (Prof accountants) and itool.com (SME market)
- Obtained an Innovation Reward at the Accountants Annual Congress in 2001, IntraBlog Award in 2007.
- Integrated and then absorbed Atomis

Architect and production executive

- Designed billing infrastructure and online registration processes.
- Deployed a robustness-oriented hosting cluster (20 servers over 4 sites) certified by IBM's SPC lab.
- Reached great service availability avg 99,96% ranked n1 by ip-label in May 2005

Development team manager (5)

- Realized as a team leader - Itool Compta, Itool Facto, Itool Scan, Itool GED, APG Facto, press routing solutions, data-exchange hub with partners.
- Supplied technological intelligence, ergonomics of applications, development methodology.



2000 · 2 years
Lille (France)

Team leader, development of Itool Compta

Atomis, Internet Services

asp/saas php/mysql framework haute-dispo métier sécurité

Designed an online software offer

Built the Itool line of products - accounting, invoicing, digital documents management



PROJECTS & OPENSOURCE

photofactory.io

web platform for artists and photo enthusiasts

RubyOnRails MongoDB MiniO Redis Docker Social auth

vancomfort

embedded box for véhicules (thermostat, telemetry, location tracking)

IoT C++ Arduino ESP32 PID I2C/SPI

rbpm

technical workflow manager to orchestrate RESTful microservices

Ruby Micro-service Opensource Workflow management PoC

rest-ftp-daemon

industrial-grade file transfer with a RESTful JSON API

Ruby Micro-service Opensource File transfer Production-grade

Manages heavy files transfers on FTP, sFTP, FTPs S3, (media files)

In production at France Télévisions since 2016 - transferring 300+ video files 2TB+ daily

pushyd

real-time events propagation service from internal broker to partners

Ruby Micro-service Opensource AMQP Push messaging

In production at France Télévisions to propagate program events and metadata to VoD partners

service-graph

micro-service dependencies and graphs from Gitab repositories

Ruby Micro-service Opensource Service map PoC