



MAIN SKILLS

Technical leadership, innovation projects, team management (CTO)

Media, web, e-commerce, mobility, start-up & scale-up (tech, business, challenges)

Constitution of skilled experts team, transformation management, skills development

Team implementation support and mentoring (hands-on expertise and mentoring)

Stakeholder advisory, training, reporting & talks, technology evangelism

Web architecture & pragmatic change management

Definition of infrastructure guidelines and urbanization

Architecture and solutions design, tech management, deployment, operations

Microservices and RESTful API patterns, containers (Docker), API-First architectures

Virtualization and cloud migration

Technical expertise

Software factory CI/CD, GitOps, move-to-cloud, Kubernetes

High-traffic hosting platforms (VoD, e-commerce, information medias)

Engineering of IoT systems, smart home, embedded (ESP32, Arduino, MQTT, Bluetooth LE)

Network architecture L2-L7, VLAN 802.1q, load balancing

HTML/CSS, Git, RubyOnRails, Debian, MariaDB, MongoDB, Apache/Nginx, RabbitMQ



WORK EXPERIENCE

vanbox.io

2023

European market

Founder & CEO

IoT Innovation Startup Hardware Software Embedded Entrepreneur French Tech



2021 · 1 year

Full remote (Paris)

Principal Engineer / Head of architecture

Scale-up Kubernetes Gitops Micro-services NodeJS CI/CD Management Mobility Principal Engineer - tech expertise and leadership

Leading software transformation to microservices (split the NodeJS monolith)

Define and build target cloud architecture (AWS, Kubernetes, CI/CD, GitOps)

Training around 12-factor principles, DevOps advocate, best practices

Mobility Framework team manager (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 Architect

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

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

Supervised and guided development teams (30 devs)

Monitoring tech-lead developers with weekly workshops

Organized and presented several internal talks - projects feedback, RabbitMQ messaging...

Managing project 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 teams awareness of state-of-the-art patterns

Handled tech choices, data modeling, and execution along with teams

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

Ensuring 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

Implementing full automation of the development process (build, test, deploy)

Ensuring full involvement of developers, testers, business experts and quality teams



2016 · 1 year

Paris (France)

Replatforming to microservices architect

E-commerce Replatforming Micro-services CI/CD PHP Docker Refined the transformation trajectory of the IT department, 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

Web architect

Entrepreneur

contractor | permanent

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

🐙 github.com/bmedici

🌐 bmconseil.com

EDUCATION

MSc Engineering (IMT Lille-Douai, ex ENIC)

Mobile communications

Marketing of technology

International conferences

Elixir Conf 2021 Warsaw

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)

Science baccalaureate

INTERNATIONAL

Mobility

France, English-speaking countries, rest of world

French

Mother tongue

English

Fluent (TOEIC 835)

Italian

Basic

INTERESTS

Scuba diving

N2 PA40/PE60

TDI Deep-diver, Nitrox

Private aviation



2014 · 4 years
Paris (France)

Architect - VoD platform re-engineering

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

Led the design of the new replay platform, 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)
- Agile iterating on all project aspects from specifications to development towards continuous deployment
- Successful production since Q2 2015, fully operational 300+ programs per day

Initiated and built 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

- Defining the 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

Hosting specialist - change management

Banking Project coordination Platform access security DenyAll rWeb ActivNetwork

Re-integrated the Crédit du Nord branch activity (integration and maintenance scopes 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

Defence security 50k+ users Cisco Bluecoat Skills takeover and network security transfer from SNECMA branch to headquarters

- Explored scope, 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

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 such as CanalSat, Canal+, CanalPlay Infinity and replay-tv (encoders, media provisioning)
- Describing and modelling business processes for the entire VoD production stack, wrote technical foundations
- Introduced micro-services and APIs (ingest, transcoding, file provisioning, monitoring)

Led the call for tenders for the workflow engine function

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

- Technical advisory for transcoding storage, distribution and long-term archives
- Leading the project team, defining specifications and horizontal/vertical scalability



2010 · 1 year
Lille (France)

Internet and security architect

Banking Platform architecture High traffic IP networking Technical architecture and evolution of Customer Internet platform

- Working with several several firewalls, reverse proxies, load balancers, IPS, Redhat/OpenBSD
- 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)

Architecture of onboard platform for TGV trains

Audit Architecture Embedded service portal Rail industry Ruby on rails PHP

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

- Audited the technical architecture proposed by the consortium Orange, Cap Gemini, Alstom, Eutelsat
- Recommendations for updates and improvements leading to new commercial opportunities
- Participated in the founding of the joint venture between Bolloré-SNCF, key public project

Defined technical fonctionnal architecture for onboard and ground-train link

- Directed development of embedded-specific interfaces



2008 · 1 month
Paris (France)

Audit and content-delivery providers selection

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

Healthcare Personal data security National respositoy Ruby on Rails PKI Setting up a system federating data for several hospitals, carrying out case studies

and providing recommendation for technical architecture, security expertise, and workflow

Assisting the project office, calls for tender, facilitating developments

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

Smart Home & IoT

Connected devices engineering (IoT) Hardware & Software (ESP32, BLE, MQTT)

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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Web and medias strategy consultant

Media & broadcast Project management CDN delivery Video streaming Opensource

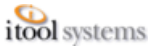
Lead the 2007 coverage of the French presidential election on the web

- Leading the dedicated team -(moderators, translators, 20 international bloggers)
- Media convergence trials (broadcaster, internet and television audience)
- Live video streaming, realtime voting results, internet visitors reactions, text-number allowing audience interaction, 5 webcams in the newsrooms (98k+ visitors for both ballots)

Provided strategic support for the IT department

- Strengthening the global image of France24 and in 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 proposal for the new web infrastructure



Co-founder and CTO of Itool Systems

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)
- Innovation Reward achieved 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)

- Team leader for the creation of Itool Compta, Itool Facto, Itool Scan, Itool GED, APG Facto, press routing solutions, data-exchange hub with partners.
- Provided technological intelligence, ergonomics of applications, development methodology.



Team leader, development of Itool Compta

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 vehicles (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