



ÉRIC NICOLAS

SOLUTIONS ARCHITECT



ABOUT ME

I am a strategic, detail-oriented problem solver with a keen and analytical mind, driven by a passion for innovation. My experience has taught me that a project's value lies in accurately identifying and contextualising the objectives to achieve—this is where I make the greatest impact.

In designing systems, I believe that clarity and elegance are key to lasting relevance: I am a stalwart advocate of radical simplicity and empower my collaborators to strive for creative solutions that will remain effective and adaptable.

TOP SKILLS

AWS Platform ◇ Arch. Design
Git Surgery ◇ Linux Sys. Admin.
DevOps ◇ TypeScript ◇ Java
Documentation ◇ DB Admin.
Web Dev. ◇ Communication
Code Quality ◇ Organisation

EDUCATION

Engineer's Degree

in Network Security

Upskilled in the Java language by Rémi FORAX, major contributor to its expansion.

Awarded with the greatest distinction. Graduated top of class.

Licentiate's Degree

in Computer Science

Awarded with the greatest distinction. Graduated top of class.

Bachelor's Degree

in Applied Physics for Electronics

Awarded with the greatest distinction. Graduated top of class; top 0.4% nationwide.

ENDORSEMENTS

Christian POPESCU

Senior Software Engineer

Éric showed obvious technical skills and remarkable abstraction capacities.

I trust in his technical and human skills.

Étienne DURIS

University Professor

Éric is a hard-working person, tackling all assignments with dedication.

I highly recommend him, he is a team player and would make a great asset to any organization.

EXPERIENCE

Principal Software Engineer at Unite (remote position)

Nov. 2022 – Present (2 years, 6 months)

Leipzig, Germany

Enabling our feature teams to focus on delivering functionality in the trying context of reinventing a B2B e-procurement platform grossing 500 million euros a year.

Mentored a junior IT developer in 2023 and 2024.

Solutions Architect at NCLS Development (freelance entrepreneur)

Dec. 2014 – Present (10 years, 5 months)

Brittany region, France

Designed the entirety of the services that make up an enterprise EHS solution trusted by the French national employment agency since 2016.

Software Engineer at Propellerhead

Dec. 2013 – Dec. 2014 (1 year, 1 month)

Auckland, New Zealand

Co-designed and implemented the engine responsible for parsing and semantically classifying 160+ years of heterogeneous historical data.

Project highlighted by the W3C as one of the foremost examples for their Data on the Web Best Practices publication released in 2017.

Project Manager at Gaspard Monge Institute

Sep. 2012 – Mar. 2013 (7 months)

Paris area, France

Led a team of 5 junior IT engineers implementing a proof-of-concept solution for a research project of the institute.

Software Engineer at Safran Aircraft Engines

Sep. 2010 – Sep. 2013 (3 years, 1 month)

Île-de-France, France

Interfaced with physicists to implement real-time ports of cutting-edge signal processing algorithms in the demanding context of aircraft and rocket engines.

Mentored a junior IT engineer from 2011 to 2013.

Apprentice Product Owner at Site Alpha, Planon group

Sep. 2008 – Sep. 2010 (2 years, 1 month)

Paris area, France

Handpicked by our CEO to elaborate with him specification documents for the company's new flagship product.

First principal engineer role

Migrate to Neovim ↗Begin using Rust ↗
for personal projectsSwitch to Arch Linux ↗Migrate Cloud resources
to ARM architecture ↗

Mastery of Git

Excellent AWS ↗ proficiencyJoin Unite ↗Mastery of RxJs ↗

Mastery of TypeScript

Mastery of D3.js ↗Migrate services to IPv6 ↗Begin contributing to the TC39 ↗

Mastery of AngularJS

Begin freelance activity

Graduation of my apprentice ↗

Excellent JavaScript proficiency

Switch to Ubuntu ↗Join Propellerhead ↗

Excellent Java proficiency

First lead developer role

First mentor role

Skilled C++ proficiency

Join Safran Aircraft Engines ↗Begin using Debian ↗

2024

Steered project back on track to meet crucial deadline

I led the initiative to revise the design of a project gone off-course and coordinated the efforts to deliver on time a future-proof solution that would address the imminent amendments to the Visa ↗ compliance mandate.

-----◇◇◇ corrected course of project ◇ with under **3 weeks**
of **6 months'** lead time ◇ before pivotal cutoff date

2023

Spearheaded redesign of dysfunctional payment workflow

I drove the complete overhaul of the procedure and architecture of the credit card payment system at a major B2B e-procurement platform ↗, and provided a working implementation that purged accidental complexity and addressed discovered vulnerabilities.

-----◇◇◇ reduced code base ◇ for a platform handling annually
by about **96%** ◇ **billions of euros** in transactions

2020

Resolved performance bottleneck in data computation engine

I proposed to better leverage a customer's database engine ↗ and pair intricate SQL queries ↗ with savvy and straightforward API design to break the impasse of a solution having far outgrown its original scope.

-----◇◇◇ from about 15 seconds ◇ entirely eliminated
down to **80 milliseconds** ◇ the **reliance on caching**

2016

Awarded public tender through innovation partnership

I designed a bespoke EHS solution ↗ lauded by a digital incubator of the French government ↗ and was funded for its implementation and continuous development.

-----◇◇◇ used by over **9,000** ◇ ongoing partnership
government employees ◇ of nearly **9 years**

2014

Built data contextualisation protocol for the Semantic Web ↗

I jointly designed as well as implemented the procedure and supporting system by which Auckland Museum ↗'s collections curator could map out the semantic attributes of their Linked Open Data ↗ platform's ever-growing digital archive.

-----◇◇◇ implemented for the **Web 3.0** ◇ highlighted
over a decade ago ◇ by **the W3C**

2012

Identified and addressed costly, recurring resource waste

I noticed an opportunity for, designed, built and drove the promotion of a workflow optimisation for technicians at a world-leading aircraft engines manufacturer ↗ to substantially reduce the strenuous cost of late-stage testing of our propulsion systems.

-----◇◇◇ over **1,000,000 euros** ◇ improved longstanding procedure
saved each year ◇ in the **defence industry**

