

# Nicolas Lamirault

 Bordeaux, France
  nicolas.lamirault@gmail.com
  nicolas.lamirault.xyz
  nlamirault

## Education

<b>Mas-</b> <b>ter of</b> <b>Com-</b> <b>puter</b>	<b>Université de Bordeaux I</b> , Computer Science	Bordeaux, France 2000
<b>DEUG</b> <b>MASS</b>	<b>Université de Bordeaux II</b> , Computer Science	Bordeaux, France 1998

## Experience

<b>Swan</b> 	Site Reliability Engineer	Bordeaux, France Feb 2022 – present
<ul style="list-style-type: none"> <li>Design and operate our Cloud Platform, running on AWS using Terraform and Terra-grunt</li> <li>Manage our Gitops flow using Argo projects like CD, Events and Workflows</li> <li>Manage the Observability platform with Prometheus, Grafana, Loki, and Open-Telemetry</li> <li>Maintain third-party softwares (Postgresql, Hashicorp Vault, ...)</li> <li>Participate to On-Call rotation</li> </ul>		
<b>Skale-5</b>	Cloud Consultant / SRE	Bordeaux, France Mar 2019 – Feb 2022
<ul style="list-style-type: none"> <li>Harmonize and unify existing CI/CD processes</li> <li>Monitoring stack based on Kubernetes (GKE, EKS, AKS, ACK) using Prometheus Operator, Prometheus, Thanos, Exporters and Grafana.</li> <li>Logging tools: ELK/EFK, Loki, Stackdriver</li> <li>Bespoke configuration of Kustomize manifests used by Skale-5</li> <li>Manage GCP and AWS platforms using Terraform, Ansible, Packer, ...</li> <li>Project templates with Cookiecutter</li> <li>Infrastructure tests using Inspec</li> <li>DevOps practices: SRE, on-call, incident-management, hands-on documentation, and many more</li> </ul>		
<b>DevOps Department, Orange Application for Business</b>	Senior Software Engineer	Bordeaux, France Oct 2016 – Mar 2019
<ul style="list-style-type: none"> <li>Collecting, centralizing, and visualizing client infrastructures from multiple Cloud Providers (Openstack, AWS, Azure) (Python/Golang/Kubernetes)</li> <li>Tools for deploying Cloud Native Applications (Kubernetes)</li> <li>API Gateway for interne services (Golang, gRPC)</li> <li>Continuous Integration and Deployment using GitlabCI and Kubernetes</li> <li>Setting metrics in Cloud services (Opentracing Python and Golang, Jaeger)</li> <li>Messaging between services using Nats.io (Golang)</li> <li>Prometheus exporters for REST and gRPC services</li> <li>Prometheus exporter for vSphere (Golang)</li> <li>Deployment on Kubernetes</li> <li>Containers monitoring (Golang)</li> </ul>		
<b>Infrastructure and Production Tools, Orange Application for Business</b>	Senior Software Engineer	Bordeaux, France July 2014 – Oct 2016
<ul style="list-style-type: none"> <li>Virtual machine management tools (VMWare / CloudStack)</li> <li>Administration Interface for the internal Cloud</li> </ul>		

- Redesigned Packaging, Integration and continuous tests (Golang / Docker)

**Cloud computing Department, Multimedia Business Services**, Software Engineer

Bordeaux, France  
July 2012 – July 2014

- Implementation of continuous integration for the IAAS.
- Redesign of the software architecture of the IAAS (Apache CloudStack, Jersey, Flask, RabbitMQ, Python CLI, NodeJS, StatusDashboard)
- Packaging for the orchestrator of the CloudStack cloud Multimedia Business Services
- Setting up a development environment and build based on VirtualBox / Vagrant / Ansible

**NFC Department, Multimedia Business Services**, Software Developer

Bordeaux, France  
June 2011 – July 2012

- NFC Access Control Service for Mobile NFC Service Center (UI administration, lifecycle AFSCM, cardlet, Android application)
- Development of SP TSM (Trusted Service Manager Service Provider), bank certification, PCI / DSS, Mastercard

**Multimedia Business Services**, Software Developer

Bordeaux, France  
Oct 2001 – June 2011

- Application Development SMS / MMS on behalf of Orange companies media (television, radio, internet), large accounts
- Interactive Voice Servers Development in J2EE and VoiceXML.
- Development of web applications (web shop, intranet, tools of administration).
- Architecture client / servers (RESTful, SOAP, XML-RPC)
- Implementation of agile practices within the team (pair programming, Test Driven Design)

**Axialog**, Software Developer

Bordeaux, France  
Jan 2001 – Oct 2001

- Corporate Quality Team Thales Avionics.
- Implementation of unit tests and integration battery
- Implementation of project management tools on Unix.

## Projects

---

### portefaix [↗](#)

Cloud Native deployment platform

- [Infrastructure As Code](#) [↗](#) using Terraform (AWS, GCP, AZure, Alicloud, Scaleway, ...)
- [Helm charts](#) [↗](#) for the Portefaix project deployed on [Artifactory Hub](#) [↗](#)
- [Policies](#) [↗](#) using [Cel](#) [↗](#), [Open Policy Agent](#) [↗](#), [Kyverno](#) [↗](#), [Kubewarden](#) [↗](#) rules
- Build cloud platform using [Kubernetes Resources Model](#) [↗](#)

### monitoring-mixins [↗](#)

Collection of reusable and configurable Prometheus alerts, and Grafana dashboards

### Terraform modules [↗](#)

Terraform modules on several Cloud providers

### OpenTelemetry lab [↗](#)

A laboratory for OpenTelemetry cloud native applications

### Divona [↗](#)

Automated configuration of a personal environment using [Ansible](#) [↗](#) collections for [Linux](#) [↗](#), [OSX](#) [↗](#) and [Windows](#) [↗](#)

## Skills

---

**Programming:** Go, Python, Java, Rust

**Operations:** AWS, GCP, Terraform, Packer, Ansible, Docker, Nomad, Consul, Vault, Prometheus, OpenTelemetry, CI/CD

**Operating Systems:** Daily: Linux (Arch, Debian, Ubuntu), OSX