Nicolas Lamirault

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 nicolaslamirault

Education

2000   **Université de Bordeaux I**, Master of Computer in Computer Science – Bordeaux, France

1998   **Université de Bordeaux II**, DEUG MASS in Computer Science – Bordeaux, France

Experience

Feb 2024 – present   **Swan** , Staff Site Reliability Engineer – Bordeaux, France

Feb 2022 – Feb 2024   **Swan** , Site Reliability Engineer – Bordeaux, France
- Design and operate our Cloud Platform, running on AWS using Terraform and Terragrunt
- Manage our Gitops flow using Argo projects like CD, Events and Workflows
- Manage the Observability plateform with Prometheus, Grafana, Loki, and Open-Telemetry
- Maintain third-party softwares (Postgresql, Hashicorp Vault, …)
- Participate to On-Call rotation

Mar 2019 – Feb 2022   **Skale-5**, Cloud Consultant / SRE – Bordeaux, France
- Harmonize and unify existing CI/CD processes
- Monitoring stack based on Kubernetes (GKE, EKS, AKS, ACK) using Prometheus Operator, Prometheus, Thanos, Exporters and Grafana.
- Logging tools: ELK/EFK, Loki, Stackdriver
- Bespoke configuration of Kustomize manifests used by Skale-5
- Manage GCP and AWS platforms using Terraform, Ansible, Packer, …
- Project templates with Cookiecutter
- Infrastructure tests using Inspec
- DevOps practices: SRE, on-call, incident-management, hands-on documentation, and many more

Oct 2016 – Mar 2019   **DevOps Department, Orange Application for Business**, Senior Software Engineer – Bordeaux, France
- Collecting, centralizing, and visualizing client infrastructures from multiple Cloud Providers (Openstack, AWS, Azure) (Python/Golang/Kubernetes)
- Tools for deploying Cloud Native Applications (Kubernetes)
- API Gateway for internale services (Golang, gRPC)
- Continuous Integration and Deployment using GitlabCI and Kubernetes
- Setting metrics in Cloud services (Opentracing Python and Golang, Jaeger)
- Messaging between services using Nats.io (Golang)
- Prometheus exporters for REST and gRPC services
- Prometheus exporter for vSphere (Golang)
- Deployment on Kubernetes
- Containers monitoring (Golang)

July 2014 – Oct 2016   **Infrastructure and Production Tools, Orange Application for Business**, Senior Software Engineer – Bordeaux, France
- Virtual machine management tools (VMWare / CloudStack
- Administration Interface for the internal Cloud

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

July 2012 – July 2014 **Cloud computing Department, Multimedia Business Services**, Software Engineer – Bordeaux, France
- 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

June 2011 – July 2012 **NFC Department, Multimedia Business Services**, Software Developer – Bordeaux, France
- 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

Oct 2001 – June 2011 **Multimedia Business Services**, Software Developer – Bordeaux, France
- 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)

Jan 2001 – Oct 2001 **Axialog**, Software Developer – Bordeaux, France
- 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