



## Platform Engineer/DevOps

### Work Experience

**Feb 2020 –** Platform Engineer/DevOps, IBM Nice, France

**Now** Other : Smaller projects using Terraform or Openshift

Detailed achievements:

- Created a full infra using Terraform for a logistic project (*Terraform*)
- Migrated and updated a client Openshift cluster logging component. (*Openshift - Logging*)

**BNPP** : Creation of Terraform providers to be able to consume APIs as an IAC asset

Detailed achievements:

- Developed multiple Terraform providers in Go using the Terraform Plugin Framework. (*Terraform - Go*)
- Tested the solutions with acceptance tests and unit tests. (*Terraform - Go*)

**BNPP CARDIF** : Project to create generic patterns based on IBM Cloud and IBM Financial Services to deliver IaaS for CARDIF digital projects following multiple principles : Architecture pattern (Financial Service), Automation (Terraform and Ansible on IBM Cloud), Security (RBAC, least privilege, private endpoints enforcement, context based restrictions, etc) and Product Oriented (Catalogs, Incremental release and Agile)

Detailed achievements:

- Produced, maintained and improved over the time multiple IaC repositories using Terraform and Ansible for IBM Cloud. We created more than 15 repositories that each represent a different layer/product of the architecture. (*Terraform - Ansible - IBM Cloud - Gitlab*)
- Created a pipeline using Jenkins (Jenkinsfile) to do automatic daily retrieval and backup from a Gitlab instance to another (*Jenkins - Gitlab*)
- Added Integration tests on our Terraform projects using Terratest (*Go - Terratest*)

**Michelin** : Project in collaboration with Michelin to create a PaaS private cloud on their on-premise infrastructure. The final goal is for Michelin to be able to provision automatically VMs (and middlewares) with Michelin prerequisites on more than 80 datacenters worldwide.

Detailed achievements:

- Created multiple IAC patterns (Middlewares and Virtual Machines) with Ansible : install and uninstall on multiple data-centers worldwide (*Ansible - Shell - OS(RHEL, Windows) - Middleware(EDB, Oracle, SQL Server, etc)*)
- Contributed to a Java Springboot API : added some features on an existing API (*Java - Springboot - Maven - Unit tests - Postman*)
- Contributed to an Angular Website : added some features on an existing website (*Angular - Typescript - Bootstrap - SCSS*)
- Migrated code base from Chef to Ansible (*Chef - Ansible*)
- Produced multiple Ansible custom modules in Python : module consuming the API and shared through Ansible Galaxy Collections (*Python - API - Unit tests - Ansible Galaxy*)
- Integrated with Git and CI/CD : Linting, quality check, automatic delivery (*Gitlab CI/CD*)
- Created Docker images : Built a custom Docker image for our Ansible repositories (*Docker - Gitlab CI/CD - Artifactory*)
- Azure : Create an Ansible galaxy collection for postinstall tasks on Azure (*Ansible - Azure*)

- Sep 2018 – Jan 2020** **Big Data Engineer**, ORANGE Mougins, France  
*Internal project for log monitoring and alerting. Composed of multiple products using Big Data technologies : log to time series, prediction and detection of anomalies and alerting on anomalies correlation.*  
 Detailed achievements:
- Improved and maintained a supervision software for internal services : *Product composed of timeseries, predictions, anomaly detection and correlation in alert (Java - Scala - Spark - Hadoop - Cassandra - ELK - Kafka - Oozie - Gitlab CI/CD - Jenkins)*
  - Created a GDPR validation software for text : *Developed a named entity extraction software (Java - Docker - NLP(Gate))*
  - Created a data transfer software on a new cluster with the goal to reach new clients : *Created an ETL Software (Hive, Kafka, Spark)*
  - Produced and added KPI to supervise our tools : *Cassandra requests to obtain some CSV report on series : (in)active, with or without predictions and a mail report (Spark - Cassandra - Java - HDFS)*
- Sep 2017 – Sep 2018** **Software Developer Apprentice**, ORANGE Mougins, France  
*POC project to create a chatbot to make intranet information easily available to non-technical employees.*  
 Detailed achievements:
- Created a chatbot to give non technical personnel an opportunity to access data without the need to go on the intranet : *Developed a Mattermost bot composed of an intent classifier and named entity extraction modules with NLP and RegExp (Go - Python - Docker)*
  - Integrated the production team : *Produced a benchmark on the team's software API (JMeter - Docker)*
- 2014 – 2016 (10 month)** **Software Developer**, LUXCARTA Mouans-Sartoux, France  
*Project to migrate the company's digital map editing software to an OS still receiving system updates.*  
 Detailed achievements:
- *Internship then fixed-term contract* : Migrated the company cartography's software on Windows 7 through Cygwin (C/C++ - Bash - Cygwin)
  - *Internship* : Improved the softwares compilation's methods (C/C++ - Bash - Cygwin)

## Certification

- July 2024** **Beyond the Basics: Istio and IBM Cloud Kubernetes Service**, France  
**April 2024** **Introduction to Containers w/ Docker, Kubernetes & OpenShift**, France  
**Feb 2023** **Enterprise Design Thinking Practitioner**, France  
**Sept 2022** **IBM Cloud Technical Advocate**, France  
**Aug 2022** **IBM Cloud Advocate**, France

## Personnal Project

- 2024** **Personnal blog to write Devops/Platform Engineering articles** : <https://nicholas-bn.github.io>, France  
 Hugo / Github Pages / Github Actions
- 2019** **Personnal formation on Pluralsight**, France  
 Big Data / Java
- 2016** **TheSuperUselessBot**, France  
 IRC Twitch bot to moderate and manage a channel (Java - Multi-Thread - Data Save(INI/JSON) - API)

## Education

- 2016 – 2018** **Master MBDS – MIAGE, Université Côte d'Azur, Sophia-Antipolis**, France  
**Specialty** : Mobiquité, Big Data et intégration de Systèmes
- **Project** – Peer to Peer distributed chat on a Chord Network
  - **Project** – Android Application : Barcode Battler
- 2012 – 2016** **Bachelor MIAGE (Computer Science), Université Côte d'Azur, Sophia-Antipolis**, France

## Skill

- Languages** Java, Python, Bash, Go, Scala, Typescript, SQL/NoSQL, C/C++
- DevOps** Ansible, Terraform, Openshift, Ansible Tower/AWX, Gitlab CI/CD, Artifactory, Jenkins, Sonar, Fortify, Docker
- Develop.** Git, Postman, Springboot, Angular, ETL, MySQL, ELK Stack, Maven, Gradle, API, Cygwin

**Big Data** Spark, Kafka, Hadoop , Oozie, Yarn, Cassandra, Hive, AWS, MongoDB, Nifi, Machine Learning  
**Cloud** IBM, Azure  
**Project** Agile, Kanban, Jira

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## Language

**French** Maternal Language  
**English** Advanced Level C1  
**Spanish** Beginner Level - Daily Duolingo to progress - 470+ days strike for the moment

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## Interests

**Hobbies** Painting, DIY, Drawing, Model making  
**Sports** Cycling, Swimming, Badminton