

Nicolas Dufour

Senior Staff Platform Engineer

✉ ndufour@ptinem.casa 📍 West Orange, NJ  [nrdufour](#)  [nrdufour](#)

A creative and motivated engineer with more than 20 years of experience in development, integration, and system/network administration, both on-premise and cloud platforms.

Skills

Infrastructure as Code terraform ansible	● ● ● ● ●	Container orchestration kubernetes helm docker	● ● ● ● ●
AI claude-code droid agents hermes agent	● ● ● ● ●	CI/CD GitOps git github actions gitlab flux	● ● ● ● ●
Scripting Bash Powershell	● ● ● ● ●	Monitoring grafana prometheus ELK splunk	● ● ● ● ●
Programming languages Go Python Rust Java C Erlang	● ● ● ● ●	Cloud computing platforms AWS Azure GCP DigitalOcean	● ● ● ● ●
Databases MySQL Postgresql Oracle Aura	● ● ● ● ●		

Professional Experience

Senior Staff Platform Engineer, Nav Technologies Bringing my experience in GitOps and SRE to improve both incident and operation flows: - Improving in-house tooling, along with AI tooling - Deployed custom grafana/prometheus along side splunk and helped dev teams to better monitor their applications - Leading SRE practices within the company - Setting up a process to create kubernetes clusters faster and automated for both ephemeral environments and production - Teaching/mentoring the engineering team on good practices with kubernetes - Leading the migration process for all kubernetes clusters of the company - Lead the migration from Gitlab to Github - Setting up a rock solid ArgoCD based pipeline for kubernetes and educating the engineering team to use it next to Github - Lead the DR process with several levels	08/2023 – present West Orange, NJ
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Senior SRE, Sectigo Inc.

10/2021 – 06/2023

Roseland, NJ

Worked among a tight-knit team of SREs brought together to improve the organization's services and its related infrastructure including:

- designed and deployed several Certificate Transparency services to help foster a safer community for certificate issuance among CA authorities
- designed and deployed workflows to allow automatic issuance of certificates (90 days initiative)
- managed and set up on-premise VMs (Proxmox, VMware)
- created and managed Kubernetes clusters and their workloads using
 - kustomizations
 - flux v2 / gitops principles
 - helm templates
- managed the infrastructure configuration via Ansible/terraform and Puppet, and created new Ansible roles

Senior DevOps Architect, Rivet Logic Corporation

01/2016 – 10/2021

West Orange, NJ

- Designed multiple SAML authentication systems with different IDPs and SPs (primarily Apache-based).
- Helped Marriott migrate several projects to the cloud and maintained those services over the years (mostly CMS based systems)
- Created automation involving CloudFormation, Terraform, Ansible, and AWS resources to ensure the process is repeatable and reliable.
- Co-lead the MS (Managed Services) team.
- Extensive AWS experience across most services (VPC, EC2, S3, RDS, Lambda, CloudWatch, SNS, etc).
- Introduced and taught Kubernetes in the company.
- Designed and deployed Kubernetes cluster on AWS using both Kops and EKS.
- Performed multiple Lift-and-shift in AWS.
- Helped design monitoring solutions using both in-house and outside of AWS.

Software Architect, Rivet Logic Corporation

10/2010 – 01/2016

West Orange, NJ

- Started the development of a brand new marketing site for MasterCard by customizing Alfresco.
- Helped to design and customize Alfresco for the NFL public site.
- Developed and customized Liferay site for IEEE and Noridian.
- Led the development and maintenance of 3 marketing sites for MasterCard.

R&D Engineer, IPsoft

11/2006 – 10/2010

New York, NY

- Key developer for IPsoft's proprietary ITSM software: IPcenter.
- Designed and developed a new AS400 system monitoring tool (Java/JTOpen/Groovy/Netty).
- Designed and developed an event correlation engine (Java/Esper/ActiveMQ/Hibernate).
- Implemented several "eBonding" system integrations (Java/ActiveMQ/Hibernate).
- Extends IPsoft's current framework to connect with new customers.

Senior Software Architect, Time Inc

01/2007 – 09/2009

New York, NY

- Designed and developed a new Content Management System (CMS) managing magazine. websites for Real Simple, Coastal Living, Southern Living, Cooking Light, Southern Accents, and others. TIPS v1.0 (Java/Spring/JCR/Flex/Ajax).
- Led the CMS development team to TIPS v3.0 (Java/Spring/JCR/Flex/LCDS).

Linux Team Leader, NeoMetSys

05/2004 – 09/2006

Paris, France

- Work for the European Commission.
 - Integration of an American Air Traffic Simulator for the European environment.
- Work in partnership with Metron Aviation Inc for NASA and FAA.
 - Production of a new Simulation/Analysis tool for NASA.
 - Software wrapper developed between FACET and POET.
 - Extensive use of different database sources (Oracle/MS SQL/Derby).
- Work in partnership with South Africa Aviation Administration.
 - Designed modules of the new Flight Data Repository for the South Africa Aviation Administration.
- Internal projects.
 - Adapted the primary American airline/airport collaboration tool for the European environment.
 - Led the Linux team and provided support on internal projects.

Consultant, NeoSys

02/1999 – 05/2004

Paris, France

- Set up and maintained the company network and appliances according to users' wishes.
- Wrote a comparative study of present Web middleware in the USA in 2003.
- Managed the primary simulation tool of the Air Traffic Flow research team (TACT) at Eurocontrol for 3 years.

 Languages

English



French



German

 **Education****Computer/Geoscience Master, Université de Paris 6**

1995 – 1998

Paris, France

Geochemistry/Geophysics Bachelor, Université de Paris 7

1993 – 1995

Paris, France

Biology Associate, Université de Paris 7

1991 – 1993

Paris, France

Certificates

Amazon Web Services Cloud Practitioner

2020 - 2023

AWS Technical Professional Online

2017 - 2023

Projects

Home Datasensing, *Home datacenter cluster and wireless sensors*

2010 – present

On-going project to create a compact datacenter and wireless sensor network for home usage.

Refuge, *Distributed storage solution*

2011 – 2013

Project dedicated at exploring distributed solutions to increase privacy for data storage/sharing.