Patrick MARIE

Senior Site Reliability Engineer

Site Reliability Engineer with 20 years of experience.
Strong background on large-scale projects
Always keen to discover, experiment & apply new techs

Skills

Languages	**Golang**, **Rust**, Python, C/C++, Java, PHP/Symfony, Javascript, SQL
Envs	**GNU/Linux** (**Centos**, Debian...), **Kubernetes**, AWS, Azure, GCE, Alibaba
Storage	**PostgreSQL**, MySQL, Cassandra/ScyllaDB, Elasticsearch, Kafka, Rabbitmq, Redis
Tools	**Git**, **Terraform**, Ansible, Chef, **Github Actions**, Jenkins, Packer, Docker

Experience

Apr 2022 – Aug 2023
Staff Site Reliability Engineer, *Aviatrix*, Full-remote
In the newly created SRE team, deployment and maintenance of :
— Designed & deployed observability stacks (kube-prometheus-stack, fluentd & opensearch)
— Bootstrapped authn/authz stack with okta/dex-idp/oauth2-proxy & IAM on EKS
— Wrote several infrastructure components (Kubernetes operator, S3 synchronization service)
— Industrialized multiple existing or new company/opensource software to fit in Kubernetes
Env : **AWS** (EKS, EC2, IAM, S3, RDS...), **Kubernetes**, **Golang**, Terraform, Github Actions, Prometheus

Mar 2020 – Mar 2022
Senior Site Reliability Engineer, *Criteo*, Full-remote
In the Observability team, handling metrics, logs & tracing, mainly maintenance of following :
— Improvement of metrics clusters (biggraphite & Prometheus with VictoriaMetrics)
2.5M metrics/sec, 250 M unique metrics, 300 servers for graphite stack, 1000 prometheus over 8 DCs
— Redesigned logs pipeline ingestion, adding filtering & routing features (1.5M logs/sec)
— Cleaned up tech debt upgrading & migrating obsolete components in several SRE teams
Env : **Prometheus**, VictoriaMetrics, ElasticSearch, Cassandra, **Python**, **Golang**, Chef

Mar 2015 – Mar 2020
Senior Software Engineer, *Qualys*, Paris
In the Malware Protection Services team, design & development of :
— WAF - Maintenance on Web Application Firewall appliance software & team build tools.
Development on Haproxy, analysis engine, agent ; Creation of AWS, GCE, Azure cloud images
— MPF - A malware storage & analysis platform to provide tools for Malware Analysis team & UI teams
Composed of an UI and micro-services ; Volume : 160M samples/year, 1M analyzes/day
— DIP - A docker based platform designed to allow dev, QA & OPS teams to run company's softwares
Env : **C/C++**, Python, **PHP/Symfony**, PostgreSQL, **Docker**, AWS, Azure, GCE, Kubernetes

Oct 2012 – Feb 2015
Senior Software Engineer, *Allmyapps*, Paris
In a 10 people startup, reporting to the co-founder/product manager :
— Leading technical team (3 developers - 2 on front web, 1 on desktop client, 1 tester)
— Writing new code & bug-fixing stuff on API, admin & backend systems
— Responsible for development and production infrastructures : Architecture, migration to AWS ;
— Platform optimization (+300 req/sec ; 2.5M monthly active users) ;
Env : **PHP**, Python, **Golang**, **PostgreSQL**, Redis, **Rabbitmq**, **Elasticsearch**, **AWS**, Ubuntu

Mar 2009 Oct 2012	**Software Engineer**, *Scan & Target*, Paris Leading company's software projects, in a 7 people team : — Development on all company software (core, moderation tools, client libraries) — Design & development of a complete social network's UGC curation — Optimization of existing company's SaaS software (over 100x) — Development of C, C++, C#, Java, Python, Ruby client libraries Env : PHP/Symfony, Java, C++, Python, PostgreSQL, Hadoop, HBase, Thrift, Redis, Centos
Jan 2008 Mar 2009	**Software Engineer**, *CS-SI*, Toulouse Software engineer for the mission/orbital station-keeping center of SPOT4/SPOT5/Helios satellites : — Maintenance on control center softwares (200k ADA/HOOD loc, 1M C++ loc) — In charge of development environment for the maintenance team Env : Ada, C++, Visual C++ ; HP/UX, Linux, Windows 2000 ; Subversion ; ISO9001-2000
Oct 2004 Jan 2008	**Software Engineer**, *EADS Astrium*, Toulouse Software engineer in the Model, Tools & System team : — Specifications, development and validation of analysis and computation tools — Validation of a complete 3D modelisation and computation software suite : http ://systema.aero/ — Specifications and development of backoffice tool to manage software licences Env : C++, QT, PHP ; Apache, Mysql, Solaris/Linux/Windows, Clearcase, ISO9001-2000
Mar 2002 Jun 2003	**Software Developer**, *Plug-It/Neuronnexion*, Amiens To validate my year at university, and followed by fixed term contracts — Intranet (contacts, planning, mails) & Internet (e-commerce) website development — Company's server set-up (web, mail, DNS...) Env : PHP, MySQL, Apache, Redhat Linux

Education

2005	**Master**, *Université Paul Sabatier*, Toulouse, France Computer systems engineering
2001	**DUT**, *Université Picardie Jules Verne*, Amiens, France Computer & network engineering

Hobbies and Interests

— Security challenges/CTF hobbyist
— Big interest in new technologies especially in Open source community & startups
— Self learning on Coursera & Udacity (Ex : Android, machine learning, Crypto, Web dev...)