

Felipe Lopes

Platform Engineer | DevOps | SRE
AI Labs Founder

📍 London, UK

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Current Focus · 2026

AI Infrastructure Lab (stealth)

Founder · In development

Building an on-premise AI orchestration layer for NVIDIA Blackwell.

Research focus: TensorRT-LLM inference, GPU scheduling, SLM deployment, and air-gapped private inference for regulated sectors.

NVIDIA Inception applicant

Education

Universidade Federal de Minas Gerais (UFMG)

Computer Science

2004 - 2007

Bachelor of Science (BSc)

Key Achievements

85% CI Cost Reduction

Systematica Investments (2025)

Designed GitHub App autoscaling for self-hosted runners on AWS Spot, cutting CI EC2 costs by 85% while improving build reliability.

AWS, GitHub, Cost Optimization

Firm-wide Observability

Systematica Investments (2024)

Led Datadog adoption across all infrastructure, unifying metrics, logs, and traces into a single platform serving trading operations.

Datadog, Observability, Trading

Founder of a stealth AI infrastructure lab focused on **private, local-first AI**. Research and engineering around NVIDIA Blackwell, TensorRT-LLM optimization, on-premise SLM deployment, and high-density GPU orchestration for organisations in regulated sectors.

Backed by **18+ years of platform engineering** at Apple, Credit Suisse, Systematica Investments, Tesco, and the UK 100,000 Genomes Project. Track record of **reducing deployment times by up to 80%** and cutting CI costs by **85%**.

Building the infrastructure for private AI, so organisations can deploy modern AI capability without handing their data to a third-party API.

Experience

Systematica Investments

Aug 2022 - Present

DevOps Engineer

London, UK

- **Architected scalable GitHub Runners solution** using GitHub App with AWS API Gateway and Lambda, enabling dynamic auto-scaling based on webhooks and events. **Reduced CI EC2 costs by 85% using Spot Instances** while providing self-hosted runners with IAM-based permissions for secure EKS deployments
- **Led company wide Datadog adoption and integration**, deploying and configuring monitoring agents and sidecars across all infrastructure, **establishing centralized observability** with Fluent Bit log forwarding to both Datadog and AWS S3 for all pods in AWS EKS Fargate
- **Transformed CI/CD capabilities** by implementing GitHub Workflows, GitHub Runners, and TeamCity pipelines for Development and QA teams, **enabling self-service deployments** for development teams and reducing manual release effort.
- **Delivered high performance infrastructure** for the Execution/Trading team, focusing on low-latency systems across hybrid on-premises (RedHat) and cloud (AWS) environments, **ensuring consistent sub millisecond response times** for latency-sensitive trading workloads.
- **Pioneered AI-enhanced DevOps practices** by integrating Anthropic Claude Code, GitHub Copilot, and OpenAI Codex into operational workflows. **Production exposure to LLM-based systems** that later informed the direction of the stealth AI infrastructure lab I now run
- **Extended HashiStack across two data centers and AWS** as sole admin for Nomad/Consul/Vault and **implemented one-click**

Multi-DC Disaster Recovery

Systematica Investments (2023)

Extended HashiStack across 2 data centers and AWS, implementing one-click failover for execution workloads to ensure trading continuity.

Nomad, Consul, Vault, DR

80% Deploy Time Reduction

Apple Pay (2022)

Modernized 2,500 Nomad jobs into 300 IaC files with Terragrunt and Terraform, reducing deploys from 25min to 4min across 5 global envs.

Terraform, Nomad, Apple Pay

100+ App Platform Migration

Credit Suisse (2019/2021)

Led GitOps migration for 100+ banking apps, introducing Kubernetes/Helm and Vault integrated pipelines for secure financial deployments.

Kubernetes, GitOps, Banking

500-700 Job Queue Eliminated

Publicis Sapient (2018-2019)

Resolved critical Jenkins bottleneck of 500-700 pending jobs by implementing automated webhooks, restoring CI/CD efficiency for 30+ developers on Open Banking.

Jenkins, CI/CD, Open Banking

80K User Load Test Success

vVoosh (2017-2018)

Built scalable infrastructure for social network platform that handled 80,000 concurrent users in 2-hour performance test, validating production readiness.

AWS, Scalability, Social Network

failover/failback for Execution workloads, materially improving disaster recovery readiness for trading operations

Apple (Apple Pay)

Jun 2021 - Jul 2022

DevOps Engineer

London, UK

- **Modernized legacy deployment infrastructure** by replacing unvalidated scripts with a modern Terragrunt/Terraform solution using the Nomad provider, **consolidating 2,500 jobs into fewer than 300 files**, eliminating code duplication and introducing robust validation
- **Reduced deployment times by 80%** (from 20-25 minutes to 4 minutes) through infrastructure modernization and optimized CI/CD pipelines, **accelerating release velocity** for global Apple Pay teams across five environments and multiple data centers
- **Implemented automated PR validation** with GitHub checks running Terragrunt Plan and posting results as comments. This **improved code quality** and reduced deployment failures through pre-merge validation
- **Enhanced security posture** by implementing client-side encryption for Terraform state files and **managed TeamCity builds as code** using Terraform for consistent, auditable build configurations

Credit Suisse

Oct 2019 - Jun 2021

DevOps Engineer

London, UK

- **Supported enterprise-scale deployment** of 100+ applications across multiple environments and regions worldwide, **deploying infrastructure** using Terraform, Ansible, and TeamCity to CloudServe platform
 - **Led GitOps transformation** migrating CI/CD from TeamCity to GitLab with Vault-integrated pipelines, **standardizing Kubernetes/Helm deployments** for 100+ banking applications across multiple global regions
 - **Developed reusable Ansible Galaxy roles** with enhanced testing using Python and parallelism. This **improved infrastructure consistency** and reduced provisioning time across DEV, TEST, UAT, and PROD environments
 - **Managed critical network infrastructure** including F5 Load Balancer entries and health checks, **ensuring high availability** for financial services applications with strict uptime requirements
 - **Initiated containerization strategy** for application deployment using Docker, Kubernetes, and Helm, **modernizing deployment practices** for legacy applications
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£4 billion Revenue Platform

Tesco (2017)

Enabled zero-downtime weekly releases for grocery platform serving millions, managing AWS infrastructure at retail scale.

E-commerce, AWS, Retail

100,000 Genomes Project

Genomics England (2015-2017)

Automated 300+ VM delivery for national genomics project, achieving 10%+ cloud savings within one week of optimization.

Healthcare, HPC, National Project

Presidential Office Delivery

SERPRO / Presidency (2012)

Led a full CI/CD and delivery process transformation for a 70-person engineering team. Over a single weekend, designed a new Agile XP operating model and associated pipelines, coaching project managers and squads to materially reduce lead time for new features and deployment risk.

Leadership, Government, High-Stakes

\$100,000 per year Cost Savings

International Syst (2008)

Won Innovation Award for translation storage system across 20 languages, eliminating duplicate translation purchases company wide.

Innovation Award, i18n

Skills

AI Infrastructure

Focus

NVIDIA CUDA, TensorRT-LLM, vLLM, GPU Orchestration, MIG partitioning, On-Premise LLM/SLM deployment, NVIDIA Blackwell (target)

Publicis Sapient (Lloyds Bank)

Oct 2018 - Sep 2019

DevOps Engineer

London, UK

- **Eliminated Jenkins job queue bottleneck** of 500-700 pending jobs by implementing automated webhooks in GitHub, **restoring CI/CD pipeline efficiency** for 30+ developers across two major banking journeys
- **Built enterprise-scale Selenium testing infrastructure** with 50-100 container Selenium grid using Helm and Kubernetes, **enabling parallel test execution** and dramatically reducing regression testing time
- **Maintained Apache Mesos cluster** serving as Jenkins slaves across 20+ machines, **ensuring continuous integration capacity** for one of the UK's largest Open Banking initiatives
- **Migrated version control systems** from Gerrit to GitHub Enterprise using Terraform. This **standardized development workflows** and improved collaboration across distributed teams

vVoosh

Sep 2017 - Sep 2018

Lead DevOps Engineer

London, UK

- **Architected reliable platform infrastructure** ensuring scalability, robustness, and security for thousands of simultaneous users. **Led DevOps strategy** and technical decision-making as sole infrastructure lead
- **Built scalable infrastructure** for social network platform that successfully **handled 80,000 concurrent users in a 2-hour performance test**, validating production readiness and platform resilience
- **Implemented Infrastructure as Code** across multiple AWS accounts using Terraform, **standardizing cloud provisioning** and enabled reproducible, version-controlled infrastructure deployments
- **Designed comprehensive monitoring solution** using Outlyer and ELK stack (Elasticsearch, Logstash, Kibana), **enabling proactive incident detection** and reduced mean time to resolution
- **Built end-to-end CI/CD pipelines** with Jenkins, streamlining development to production workflows, **accelerating feature delivery** while maintaining deployment quality

Tesco

Apr 2017 - Sep 2017

Senior DevOps Engineer

London, UK

- **Supported weekly deployments** of mobile and web applications generating over **£4 billion in annual revenue**, **ensuring zero-downtime releases** for high-traffic e-commerce platform serving millions of customers

MLOps & AI Platform

Focus

Model serving, quantisation, inference optimisation, air-gapped deployment patterns

Cloud Platforms

Expert

AWS (EC2, EKS, ECS, Lambda, S3, VPC, CloudWatch, CloudFront, RDS, ElastiCache, DynamoDB), Google Cloud Platform, VMware, IBM Bluemix

Container Orchestration

Expert

Kubernetes, Docker, Helm, HashiCorp Nomad, Apache Mesos, ECS, Fargate

Infrastructure as Code

Expert

Terraform, Terragrunt, Ansible, Packer, SaltStack, Puppet

CI/CD Platforms

Expert

GitHub Actions/Workflows, GitLab CI, Jenkins, TeamCity, Bamboo

HashiCorp Stack

Expert

Terraform, Vault, Consul, Nomad, Vagrant

Monitoring & Observability

Advanced

Datadog, Prometheus, Grafana, Splunk, ELK Stack, New Relic, Sentry, Fluent Bit

Programming & Scripting

Advanced

Python, Bash/Shell, Java, PHP, Perl, Node.js

Databases

Advanced

PostgreSQL, MySQL, MongoDB, Oracle, Redis, DynamoDB

- **Managed cloud infrastructure** across comprehensive AWS services including EC2, ECS, Lambda, and Direct Connect, **maintaining performance and reliability** for mission-critical retail operations

Genomics England (100,000 Genomes Project)

Sep 2015 - Mar 2017

Senior DevOps Engineer

London, UK

- **Automated delivery infrastructure** for the nationally significant 100,000 Genomes Project (NHS England), **managing 300+ VMs** including High-Performance Computing systems on VMware and AWS
- **Achieved 10%+ cloud cost savings** within one week through infrastructure optimization, **demonstrating immediate ROI** on optimization initiatives
- **Provisioned infrastructure at scale** using Packer, SaltStack, Jenkins, and Terraform, **enabling reproducible deployments** for genomics research computing environment
- **Migrated and upgraded enterprise systems** including Atlassian suite and Forgerock identity management and **built centralized logging** with ELK stack deployment

SERPRO (Brazilian Federal Data Processing Service)

Jan 2014 - Aug 2015

DevOps Engineer

Belo Horizonte, Brazil

- **Administered Linux infrastructure** for federal government projects, ensuring functionality of all modules across development, testing, validation, and production environments, **maintaining critical government systems** with high availability requirements

ehPromocao

Jan 2014 - Jan 2015

Co-Founder & DevOps Engineer

Belo Horizonte, Brazil

- **Co-founded and built e-commerce deals platform**, in parallel with SERPRO role, reaching **15,000+ downloads on Google Play**, **architecting full-stack solution** using Python/Flask backend with MongoDB and AWS infrastructure
- **Developed web scraping engine** using Scrapy to aggregate deals from major Brazilian e-commerce sites, **creating value** for users by filtering genuine bargains from promotional noise

SERPRO

Jan 2012 - Dec 2013

DevOps Engineer, Web Developer & Technical Leader

Brasilia, Brazil

- **Implemented a robust deployment architecture** for the **Brazilian Presidency's government project monitoring system**, replacing ad-hoc manual releases with scripted, repeatable deployments suitable for a 24/7 presidential-office environment.

Awards

Innovation of the Year Award

International Syst
2008

Proposed and implemented translation storage solution across 20 languages, generating \$100,000 annual savings by eliminating duplicate translation requests.

Languages

English

Fluent

Portuguese

Native

- **Redesigned how federal government development teams delivered software** by standardising code versioning practices and introducing **Redmine with SCRUM/Agile XP workflows**, training project managers and engineers to use backlogs, iterations and continuous integration for new features.
- **Designed and delivered multiple federal government applications**, including modules for the **national anti-drug programme**, ensuring they followed the new **version-controlled, CI/CD-driven delivery process**.

SERPRO

Apr 2010 - Dec 2011

Senior Web Developer

Belo Horizonte, Brazil

- **Led mainframe migration project** to SERPRO's Demoiselle platform (MVC framework on Java EE), **modernizing legacy systems** for continued government operations

Accenture

Sep 2009 - Mar 2010

Web Developer

Belo Horizonte, Brazil

- **Developed Manufacturing Execution Systems (MES)** for Vale S.A. as part of 50-person team, **implementing MVC architecture** using Java EE for enterprise manufacturing operations

Gaia Technologies

Sep 2008 - Mar 2009

Web Developer

Belo Horizonte, Brazil

- **Built profit-sharing system** in one month using BPM modeling with small team of 8, **delivering rapid business value** through efficient development practices

International Syst

Oct 2007 - Aug 2008

System Developer

Belo Horizonte, Brazil

- **Won Innovation of the Year Award** for proposing and implementing translation storage solution across 20 languages, **generating \$100,000 annual savings** by eliminating duplicate translation requests