

Romain Gallet

SOFTWARE ARCHITECTURE • DATA ENGINEERING • DEVOPS • AWS CERTIFIED

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Services

15+ years of expertise in designing and implementing high-availability streaming data architectures, enhancing client infrastructures to meet strategic fast and big data objectives. Specialized in DevOps methodologies, utilizing cutting-edge tools such as Kubernetes, Terraform, Kafka, and Kinesis to streamline cloud-based solutions. Proficient in Java, Scala and Rust software development, crafting robust applications with Akka, FS2, Kafka Streams, and Spark, from initial requirements to final deployment. Engineered CI/CD pipelines to ensure rapid, reliable delivery of complex software systems, reinforcing a culture of continuous improvement and innovation.

Specialisations

Devops	aws docker kubernetes terraform cloudformation jenkins circleci argocd
Backend	kafka kinesis ksqldb mongodb dynamodb rdbms amqp jms
Observability	opentelemetry datadog smithy openapi swagger
Programming	scala java groovy rust go python cats fs2 http4s play
Data engineering	etl spark spark streaming kafka streams akka streams flink pii gdpr

Consulting

Disney streaming

SCALA | JAVA | GO | DATA ENGINEER

Luxembourg

October 2022 - present

Architected a solution able to manage over 800 million users, ensuring seamless auto-scaling to accommodate 200k requests/second. Engineered Single Sign-On (SSO) authentication backend over openapi and smithy4s, leveraging http4s, and utilising Kinesis and DynamoDB streams for state management and materialised views creation.

Developed a Pairwise Pseudonymous Identifiers (PPID) system utilising http4s and DynamoDB, enhancing user privacy through unique, opaque identifiers for third-party client-specific interactions.

Depop

SCALA | JAVA | DATA ENGINEER

Luxembourg

March 2022 - September 2022

Engineered KSQL and Spark Streaming data pipelines, delivering enriched streaming and batch datasets with optimised sub 15-minute materialised views (Delta tables) for efficient OLAP queries utilising dbt, Spark, and Athena.

Zego

SCALA | JAVA | DATA ENGINEER

Luxembourg

Nov 2021 - Aug 2022

Engineered architecture integrating third-party vehicle and insurance data via REST APIs, gRPC, FTP, and WebSockets, leveraging Kinesis and Akka-Streams for ingress and egress data flows. Orchestrated CI/CD pipelines utilising Kubernetes, ArgoCD, and Buildkite to ensure deployment and scaling of microservices and stream processors.

Slice

SCALA | JAVA | DATA ENGINEER

Luxembourg

Apr 2021 - Oct 2021

Spearheaded migration to a high-throughput, stream-oriented data processing architecture, enhancing system scalability and performance.

Provided expert guidance and led the development of robust stream processors on AWS and Confluent platforms. Engineered CI/CD pipelines for streaming data (Kafka Streams, Spark Streaming, ksqldb) from Databricks to Confluent, ensuring seamless deployment and integration.

Compare The Market

SCALA | JAVA | DATA ENGINEER

London

Jan 2020 - Mar 2021

Designed the architecture and technical strategy for advanced streaming infrastructure, effectively engaging with Architecture Design Forums (ADF) and synchronising with key stakeholders. Defined and implemented timelines and workflows for the deployment of proposed technical solutions. Orchestrated CI/CD pipelines for streaming data flows utilising Kafka Streams, Akka Streams, and Spark Streaming on EMR, EC2, EKS, and MSK.

Other clients

 Depop •  Guardian •  Vocalist Office Agency •  Sainsbury's •  Capco •  News UK •  HappyInc •  sky •  Home Office •

 DMC Digital •  ITHR •  TripAdvisor •  SixAndCo •  VoxMobili •  Fullsix

Education

 **Télécom Paris (ENST)**

MASTER IN BUSINESS MANAGEMENT

Paris

2006

 **Greenwich University**

MSc IN COMPUTER SCIENCES, 1ST CLASS WITH DISTINCTION

London

2004

 **Université de Picardie Jules Verne**

MASTER ISRI (INGÉNIERIE DES SYSTÈMES ET DES RÉSEAUX INFORMATIQUES), 1ST CLASS

Paris

2003

 **Birmingham University**

BSC IN COMPUTER SCIENCES

London

2002

Certifications

 **Amazon**

AWS CERTIFIED SOLUTIONS ARCHITECT – ASSOCIATE

2021

 **École Polytechnique Fédérale de Lausanne**

FUNCTIONAL PROGRAMMING IN SCALA

2017

 **Oracle**

ORACLE CERTIFICATION FOR JAVA PROGRAMMER (OCJP)

2012

Projects

 **Authenticator-rs**

GITHUB.COM/GRUMLIMITED/AUTHENTICATOR-RS

Authenticator-rs is an MFA (multi-factors authentication, TOTP code generation) Linux desktop application written in Rust and gtk3. Generates totp tokens to use with mfa-enabled security backends.

 **Kinesis-tailr**

GITHUB.COM/GRUMLIMITED/KINESIS-TAILR

Rust-based cli tool to tail kinesis streams. Tailr is orders of magnitude faster than other publicly available tools, able to maximise throughput of kinesis shards.

 **GeoCalc**

GITHUB.COM/GRUMLIMITED/GEOCALC

Geocalc is a java library providing arithmetic tools to manipulate Earth coordinates. Allows for various distance, trajectory and surface calculations. Formed the basis for rentbarometer.com (defunct) to calculate geo-based properties prices.