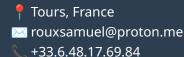
# **Samuel Roux**



French (Native), English (Fluent)

in https://linkedin.com/in/samuel-roux

O https://github.com/SamlRx

# Summary

Seasoned Data Engineering Leader with over 15 years of experience in architecting and scaling data platforms. Proven expertise in leading cross-functional teams, implementing cloud-native solutions, and driving data strategies that align with business objectives. Adept at fostering collaborative environments, mentoring engineers, and delivering high-impact scalable solutions.

# **Competencies**

**Leadership & Strategy:** Team Building, Cross-functional Collaboration, Agile Methodologies **Data Engineering:** ETL and ELT Pipelines, Batch and Real-time Data Processing, Data Modeling

Cloud Platforms: AWS, GCP

Technologies: Kafka, Spark, Beam, Dataflow, DuckDB, Debezium, Terraform, Kubernetes, Docker

Programming: Python, Java, SQL

Datastores: PostgreSQL, MongoDB, Hive, BigQuery, S3, Iceberg

System Design: Medallion Data Architecture, SOLID, Hexagonal Architecture

Tools: GitHub, GitLab, Jenkins, CircleCI, Docker Compose, Maven

# **Experience**

## Engineering Manager Data Platform - Hands On - Team of 4

Crossbeam (GTM) — 2024/09/01 to Present

Aurora, PostgreSQL, AWS, GitLab, Kafka, Temporal, Debezium, DuckDB

- Established and led a distributed Data Platform team across three time zones, enhancing data infrastructure resilience and scalability.
- Architected a cloud-native data solution enabling near real-time access to business metrics.
- Implemented career development programs, resulting in increased team retention and technical ownership.

#### **Staff Data Engineer**

Crossbeam (GTM) — 2023/01/01 to 2024/09/01

Dataflow, Apache Beam, PubSub, Python, Kubernetes, Terraform, MongoDB, Docker, PostgreSQL, Debezium

- Defined scaling principles for data infrastructure, supporting rapid horizontal growth.
- Developed production-grade streaming and batch pipelines using GCP, Apache Beam, and MongoDB.
- Introduced CI workflows and infrastructure as code practices, increasing deployment velocity and reliability.
- Collaborated with product and engineering teams to translate complex data needs into scalable solutions.

#### Tech Lead Data - Hands On - Team of 7

Harmonie Mutuelle (Health Insurance) — 2019/04/01 to 2022/12/31 Spark, Kafka, Java, Hive, HBase, Maven, Jenkins

- Led a team of seven in delivering scalable, high-performance data solutions aligned with health insurance initiatives.
- Executed a roadmap for a modernized data platform, enabling real-time analytics and regulatory reporting.
- Delivered complex batch and streaming data pipelines for fraud detection, claims processing, and member insights.
- Established engineering excellence standards, including automated testing and CI/CD workflows.

#### **Big Data Engineer**

*Harmonie Mutuelle (Health Insurance)* — 2018/01/01 to 2019/04/01 Spark, Kafka, Java, Hive, HBase, Maven, Jenkins

- Designed scalable real-time and batch data architectures, improving system throughput and reducing technical debt.
- Introduced performance benchmarks and coding guidelines, enhancing maintainability and onboarding speed.
- Developed CI/CD pipelines, accelerating release cycles and enabling continuous delivery to production.

#### **Enterprise Architect**

*Harmonie Mutuelle (Health Insurance) — 2014/07/01 to 2017/12/31* Datastage, Java, SQL, Kafka, Maven, Jenkins

- Developed and executed IT strategy roadmaps, aligning data architecture with long-term business goals and enabling scalable digital transformation initiatives.
- Established data processing best practices, optimizing system performance and resource efficiency across legacy and modern platforms.
- Standardized engineering workflows and tooling, improving developer productivity and reducing deployment friction through CI integration and code quality practices.

### **Data Engineer**

Harmonie Mutuelle (Health Insurance) — 2011/06/01 to 2014/06/30 Datastage, Oracle, PL/SQL

- Developed and maintained ETL processes using Datastage, Oracle, and PL/SQL, ensuring data integrity and availability.
- Collaborated with business stakeholders to define data requirements and deliver actionable insights.

#### **Data Engineer**

Business & Decision (Services) — 2009/02/01 to 2010/12/31 Datastage, Oracle, PL/SQL, Siebel

- Designed and implemented data integration solutions using Datastage, enhancing data flow efficiency.
- Worked with cross-functional teams to deliver data solutions that supported business intelligence initiatives.

### **Full Stack Developer**

Moustic Multimédia (Web development) — 2008/06/01 to 2008/08/31 PHP, Joomla, CSS, Action Script, MySQL

#### **Business Intelligence Developer**

*VM-Matériaux (Building materials)* — 2007/04/01 to 2007/08/31 Microsoft Reporting Services, PL/SQL

# **Education**

#### **Master's Degree in Computer Science**

University of La Rochelle — 2007 to 2009

**Specialization:** System Design and Architecture

## **Bachelor's Degree in Software Engineering and Mathematics**

University of La Rochelle — 2004 to 2007

### **Interests**

- Martial Arts Practitioner (17+ years)
- Maker with a focus on 3D Printing and Woodworking