James Sterling

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PROFESSIONAL SUMMARY

Senior Software Architect with 12 years of experience specialising in distributed systems and cloud-native migrations. Proven track record of reducing infrastructure costs by 30% while improving system uptime to 99.99% for enterprise-scale SaaS platforms. Expert in microservices, Event-Driven Architecture, and mentoring high-performance engineering teams.

WORK EXPERIENCE

Principal Software Architect | SkyNet Technologies | London, UK
Apr 2019 - Present
- Spearheaded the migration of a legacy monolithic media platform to AWS microservices, resulting in a 45% reduction in operational overhead.
- Designed and implemented a real-time data processing engine using Apache Kafka that handles over 2 billion events per day.
- Reduced annual cloud infrastructure expenditure by £180,000 through the implementation of automated spot instance scaling and storage optimisation.
- Mentored a team of 12 senior engineers on architectural best practices and led the internal Architecture Review Board.
- Introduced a standardised API Gateway strategy that improved developer productivity by 30% across four global engineering hubs.

Senior Software Architect | Barclays Capital | London, UK
Aug 2015 - Mar 2019
- Developed the functional model for a secure, high-frequency trading interface that processed £400M in daily transactions.
- Engineered a fault-tolerant database architecture using PostgreSQL and Redis, achieving 99.999% uptime for core financial services.
- Orchestrated a zero-downtime migration of 4TB of sensitive customer data during a major platform version upgrade.
- Collaborated with security teams to implement OAuth2 and OpenID Connect protocols, reducing unauthorised access attempts by 98%.
- Authored comprehensive technical documentation for the system's modular architecture, adopted as the company-wide standard.

Software Designer / Lead Developer | Graphite Systems | Manchester, UK
Jun 2011 - Jul 2015
- Designed the architectural framework for a healthcare SaaS application that served over 200 hospitals nationwide.
- Integrated complex third-party EHR systems using HL7 and FHIR standards, increasing data interoperability by 60%.
- Optimised application performance by identifying and resolving memory leaks, leading to a 40% improvement in response times.
- Led a cross-functional team of 8 developers in the adoption of Agile methodologies and Test-Driven Development (TDD).
- Cut deployment cycles from bi-weekly to daily by implementing a robust Jenkins-based CI/CD pipeline.

EDUCATION

Imperial College London | Master of Science | Computing (Software Engineering)
Sept 2009 - May 2011

University of Manchester | Bachelor of Science | Computer Science
Sept 2005 - May 2009

SKILLS

Microservices Architecture, Domain-Driven Design (DDD), Event-Driven Architecture, RESTful & GraphQL API Design, Serverless Computing, AWS / Azure / GCP, Kubernetes & Docker, Terraform (IaC), CI/CD Pipeline Automation, Database Sharding & Scaling, Java / Spring Boot, Python / Django, Node.js, Go (Golang), C# / .NET Core

CERTIFICATIONS

AWS Certified Solutions Architect – Professional | Amazon Web Services (2022)
Certified Kubernetes Administrator (CKA) | The Linux Foundation (2021)

LANGUAGES

English (Native)
German (C1 Professional)

ACTIVITIES

QCon London Speaker
Presented a session on scalable microservices patterns to an audience of 500+ attendees.

Open Source Contributor
Maintainer of an open-source architectural patterns library on GitHub with over 2k stars.

CV example from guide at vitae.so