

Malcolm Smith

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Website: msinteractive.co.uk

Contact: [LinkedIn](#) (email/phone available on request)

Location: Surrey, UK

Experience: 16+ Years Professional Experience

Qualifications: BA Hons Degree

Pronouns: He/Him/His | [Why Pronouns?](#)

Interests: Family, music, friends, learning, yoga, food, travel

Available: December 2023 / January 2024

Seeking: Permanent Full-time Remote/Hybrid.



Summary

Intro: I bring 16+ years of professional engineering, architecture, and operational experience across data, platform, and software characterised by rapid learning, acclaimed leadership, and constant motion.

Role: As Real Customer Insights Team Lead at Keysight Technologies I am the hands-on and cross-discipline **Principal Engineer** responsible for expertly leading and managing a high-functioning (elite!) team of cross-discipline Software, Data, Platform, and QA Engineers who thrive in DevOps. I am the principal technologist who both leads and manages the team, manages stakeholders, and contributes hands-on to the design and delivery of ***all*** aspects of Keysight's highly available data/AI SaaS platform using cloud native and open-source securely and performantly - including AI/ML.

Contribution: My influence as a principal technologist extends beyond the immediate team into a broad range of cross-functional software engineering and operational contexts across the entire product and engineering landscape, including C-suite to D-suite and external stakeholder management. I provide technical leadership and architecture including platform design, REST API design, microservices, OIDC/OAUTH2, full-stack, and containerised workloads. By my design we leverage Terraform to deploy VPC, Bastion, Data Lake and Warehouse, distributed Stream and Batch Data Processing, Machine Learning, and Business Intelligence securely. SLAs are established and met via systems integration, scalable deployment and technology, compliance, security scanning, management of cross-cutting concerns, integration testing, production monitoring, observability, traceability, and triaging platform issues live. By my advocacy automation, Terraform, Docker, CI/CD, DevOps, and GitOps underpin every aspect. Pairing up with multiple development teams I contribute to an extensible DevOps ecosystem including Python/Bash tooling, Terraform, Docker, and Helm.

Highlight: I delivered a multi-tenanted (ISO27001 compliant) SaaS data platform end-to-end in AWS (greenfield) - largely shaped by my own technical vision for the product. Rounding out 14 years experience delivering SaaS data products (software, data, platform, and operations) I built, directed, and managed a team to live and breathe DevOps and operate highly performant Agile SCRUM for high-quality, highly-scalable, and highly-available service delivery. Featured is complex data modeling to solve business-critical requirements plus researching, prototyping, and operationalising AI/ML.

Participation: Primarily, you'll find me shoulder-to-shoulder with cross-functional engineers providing technical leadership, architecture, code, testing, mentoring, troubleshooting, and operational support using DevOps and Agile SCRUM methodologies. Secondly, you'll find me engaged with key internal and external stakeholders laser-guiding requirements and advising as the principal technologist.

Approach: I'm a self-starter who puts the success of the team and long-term prospects at the forefront of technical decisions while balancing the pragmatic needs of short-term technical and Agile delivery goals . I'm not a one-man-band or hero - my soft skills and people-orientation will set you up for success in organisational and team goals by nurturing talent and creating an environment to thrive in.

About Me: I am a fast learner, an exceptional manager, a natural technical lead, and an epic team player. I am highly motivated for my next step. I wish to be challenged more than I have ever been challenged in my career. Here is a cross-section of my technical proficiencies in the last 5 years.

- **Languages:** Python • Java • NodeJS • JavaScript • C# • Bash
- **Open Source:** Hadoop • Apache Spark • Pandas • NuMPI • ML Libraries • Keycloak (IAM)
- **Platform (AWS):** EC2 • VPC • Lambda/Fargate • S3 • Elastic Kubernetes Service (EKS) • Elastic Container Service (ECS) • Elastic MapReduce (EMR) • SageMaker • ECR • API Gateway • Kinesis • DynamoDB • RDS • Glue • Athena • SNS • SQS • CloudWatch • CloudFront • QuickSight
- **Data Storage:** Data Lake (S3 & Glue) • DDB • MySQL • PostgreSQL • Elastic • MongoDB
- **DevOps:** Jenkins • GitLab Automation • CircleCI • Puppet • Terraform • Docker • Kubernetes • Grafana • Kibana • Prometheus • Linux • Keycloak (IAM) • Prowler
- **Methodology:** Agile • SCRUM • Kanban • Lean • Cross-discipline • TDD • BDD • DevOps • GitOps • DataOps • MLOps

Professional Experience and Education

Real Customer Insights (RCI) Team Lead | Keysight Technologies | Jun 2018 to Present
Technical Leadership • Technical Architecture • DevOps • Platform Engineering • Data Engineering • Software Engineering • Line Management • Agile SCRUM

Lead Web Application Developer | Eggplant → Keysight Technologies | Jun 2017 to June 2018
Technical Leadership • Technical Architecture • DevOps • Data Engineering • Software Engineering • Agile SCRUM

Senior Web Application Developer | NCC Group → Eggplant | Apr 2015 to June 2017
Software Engineering • DevOps • Technical Architecture • Technical Leadership • Agile SCRUM

Web Application Developer | NCC Group | Nov 2014 to Apr 2015
Software Engineering • Agile SCRUM

Lead Interaction Engineer | Signup Technologies | May 2013 to Nov 2014
Software Engineering • Technical Leadership • Line Management

Senior Interaction Engineer | Signup Technologies | Jan 2011 to May 2013
Software Engineering • Technical Leadership

Interaction Engineer | Signup Technologies | Sep 2010 to Jan 2011
Software Engineering

BA Hons Degree in Design for Interactive Media | University of Gloucestershire | 2007

Please don't just take my word for my experience and proficiencies. Given we work with data, we expect empirical analysis of qualitative and quantitative data. I invite you to view the [recommendations](#) and [endorsements](#) collected during my tenure at Keysight Technologies.

Responsibilities/Accountabilities Held in the Last 5 Years

Technical Leadership: Critical decision-making • Solidly apply computer science principles, with confidence, across a broad selection of languages, technologies, and patterns • Mentor and coach less experienced Engineers • Facilitate technical discussions, encourage collaboration, and provide direction amidst uncertainty • Be on-point for customer and operational escalations • Work in a modern, agile development team following best practices like code review, TDD/BDD, CI/CD, and pairing • Support engineering teams to be highly performant and focussed • Design and contribute to testing at all levels of the testing pyramid • Identifying, prioritising, and paying off Technical Debt • Troubleshooting.

Technical Architecture: Drive (and contribute to) discussions supporting decision making with respect to system infrastructures, architectures, systems, libraries, workflows, processes, etc. • Take strategic approaches to problem solving and see the big picture at all times • Collaborate in project governance, writing requirements, generating initiatives/epics/user stories, roadmap planning, and software release planning • Communicate with stakeholders and audiences at different levels • Understand of the importance of operational, security, and legal factors when designing solutions • Articulate trade-offs and make informed decisions around design and technology choices • Understand the maintainability of design choices • Comprehend and actively manage Technical Debt at all stages of design.

DevOps: Champion and maintain highly desirable DevOps best practices to establish version control, collaboration, automation, monitoring, quality, security, and compliance at high velocity • Lead by example to embody the DevOps ethos/principles throughout continuous release cycles • Support truly self-organising, cross-discipline, and operationally enabled engineering teams • Design and deliver Continuous Integration/Continuous Delivery • Leverage modern GitOps practices for Operational Excellence in platform deployment.

Platform Engineering: Determine the most appropriate route to get an app/model/database/ETL from prototype to production to deliver business value early • Architect cloud infrastructure with minimal risk, time, and cost for maximal durability, availability, and performance • Support R&D and Data Engineering • Manage platform SLAs, capacity, scaling, and budgets • Be Well-Architected • Curate efficient, maintainable, and extensible Infrastructure as Code • Operationally run production systems including debugging and live incident management.

Data Engineering: Data governance, security, and compliance • Deliver innovative data solutions to underpin business-critical requirements • Design highly available distributed data processing at scale according to requirements • Lead technical implementations across Data Lake, Data Warehouse, Data Modeling, ETL design, and more • Support Data Science • Engineer and optimise Machine Learning (and processes) • Drive up data efficiency, effectiveness, and quality via DataOps • Data technology and vendor selection • Production support for data-centric issues • Troubleshooting.

Disciplines: I am a highly versatile and broadly experienced software engineer with professional experience including:

- **Data Engineering** _____ 8 Years
- **Platform Engineering** _____ 5 Years
- **DevOps** _____ 8 Years
- **Technical Architecture** _____ 8 Years
- **Technical Leadership** _____ 12 Years
- **Line Management** _____ 8 Years
- **Agile SCRUM** _____ 10 Years
- **Software Engineering** _____ 16 Years

Further information can be provided on request.

