# Liam David Hughes

## Senior Cloud Architect

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An experienced Senior Cloud Architect, with an over 8 year technical background and proven experience in designing and implementing cutting-edge cloud solutions using a diverse range of AWS and Azure services. Including a specialty in architecting serverless, globally resilient platforms, ensuring seamless integration, high performance, and robust security.

## EXPERIENCES

### Reapit | April 2024 - Present

AWS Solutions Architect

- Architect embedded in flagship product (Agency Cloud), a CRM allowing estate agents to manage properties throughout the UK.

### Kuro (Blacksmiths Group subsidiary) | Jul 2023 - Jan 2024

Head of Cloud

- Part of the AWS Defence Accelerator 2023
- Architected an implemented a serverless event-driven driven architecture utilizing services such as Lambda, SQS, SES, CloudFormation, CloudFront, CloudFront Functions, Lambda@Edge, S3, DynamoDB, API Gateway, AWS WAF, and Cognito.
- Crafted a cross-device passwordless email authentication system using custom signed tokens, SES, Cognito and Lambda. This allowed users to sign in into an account by verifying their access to an email address.
- Designed and deployed an event-driven payment and invoicing solution with Stripe, Stripe SDK for python3.11, Lambda, EventBridge and DynamoDB.
- Drafted SES templates providing HTML/CSS designed for access and notification emails to customers. Sending of emails was automated using DynamoDB Streams and Lambda.
- Developed and built a feature providing presigned limited access to desktops through CloudFront using custom signed tokens, AWS WAF, S3, EC2, API Gateway, Lambda, Cloudfront Functions, Lambda@Edge, DynamoDB, SES and the PyJWT library for python3.11.
- Ensured the platform above was deployable using IaC more specifically SAM (Serverless Application Model).

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### AWS Certified

- Cloud Practitioner
- Solutions Architect - Associate
- Developer - Associate
- SysOps Administrator - Associate
- DevOps Engineer - Professional
- Solutions Architect - Professional
- Database - Specialty
- Security - Specialty
- Advanced Networking - Specialty

### Azure Certified

- Fundamentals
- AI Fundamentals
- Administrator Associate
- Solutions Architect Expert

### GCP Certified

- Cloud Digital Leader

### Other Certifications

- OffSec Wireless Professional (OSWP)
- TOGAF 9 Foundation
- CompTIA Network+
- CompTIA Security+
- CompTIA Project+

## Certifications Sidebar

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## Blacksmiths Group | Oct 2022 - Jan 2024
### Senior Cloud Architect

- Consulted for clients with current solutions in AWS and Azure, ensuring they adhered to best practices and providing detailed reports on findings
- Was the cloud lead of a larger incident response team to assist a Critical National Infrastructure client with compromised resources in Azure. Tasks involved to retrieve and analyze logs, identify security gaps, and provide as well as oversee the implementation of a more robust and hardened architecture.
- Provided clients with architectural designs to implement which fit their requirements as well as internal skillsets. These designs also noted the AWS Well Architected Framework and how it was designed with the 6 pillars in mind.

## Blacksmiths Group | Jan 2022 - Dec 2022
### Security Consultant (Part Time)

- Conducted comprehensive security assessments of Information and Operational Technology (IT & OT) Infrastructure.
- Reviewed networking rules and firewall logs ensuring segmentation was applied and strict boundaries enforced.
- Crafted detailed report findings with information about vulnerabilities, why, severity and recommendations to rectify.
- Reviewed policies and procedures on how access was established into the network for different personnel, on and off site.
- Reviews involved travel to multiple countries and visiting sites classed as Critical National Infrastructure.

## Blacksmiths Group | Mar 2021 - Oct 2022
### Cloud Architect

- Managed the internal AWS Organization, created AWS Accounts and controlled access using AWS SSO (IAM Identity Center).
- Authored CloudFormation Templates to be deployed as StackSets within the organization providing an automated, custom, and unified account set up model along with AWS Control Tower.
- Architected and deployed the backend for a web application using SAM (Serverless Application Model) and CloudFormation. The services deployed included Fargate, S3, Lambda, API Gateway, Cogntio, OpenSearch, ECR, NAT Gateways and SES. The deployed platform was Multi-AZ resilient.
- Guided start ups towards setting up in AWS and provided architectural solutions they could implement in the cloud to match their requirements
- Consulted on migration from on-premise to AWS. Provided options such as re-hosting, re-platforming and re-architecting while factoring potential skill and time constraints.
- Developed Azure DevOps pipelines with access to deploy/update resources into AWS accounts using predefined parameters.

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## Blacksmiths Group | Aug 2020 - Mar 2021
### Operational Technology Adviser

- Assisted in developing a global secure communications and collaboration platform in AWS using services such as, VPC Peering, EC2, NAT Gateways, KMS, EventBridge and Lambda.
- Crafted IaC templates using Terraform which provided the deployment of secure platforms in AWS.
- Designed a secure communications network while also providing reduced latency for globally dispersed clients.
- Migrated the previous AWS Account structure to use cross account IAM roles and afterwards implemented Control Tower and AWS SSO.
- Created SCPs to ensure secure management of critical services within accounts at an organizational level.
- Implemented secure storage solutions using AWS KMS encryption when required.

## British Army | Mar 2019 - Aug 2020
### Army Recruiter

- Represented the British Army and recruited new personnel into the armed forces
- Provided outreach and community engagement, going into schools and talking about army life and the duties performed by the military in general.
- Delivered presentations to potential new recruits on military requirements, assessments and army life.
- Provided advice on potential roles to match a candidates skillsets and passions and a roadmap to achieving a job in the desired role.

## British Army | Sep 2015 - Aug 2020
### Communications Systems Engineer (Cyber Engineer)

- Second in command of the Regimental Receipts and Issues store within the Support Squadron.
- Crafted and reviewed detail documentation pertaining to faults within the regiment's communication equipment.
- Provided network and system administration assistance to the other squadrons when required.
- Led a field engineering team during a one-month training exercise, addressing the regiment's second line technical issues, participating in regimental-level meetings, and improving the efficiency of diagnosing and exchanging faulty equipment across remote team locations.
- Issued condemnation certificates for faulty equipment when it was deemed beyond local repair, and obtaining proper authorization from relevant personnel in command.
- Acted as a liaison between the military and civilian contractors for the repair of faulty equipment.