

Raising the bar and creating technology solutions to make people's lives better. Reputation as a "get it done" cybersecurity, big data, and cloud engineering transformation leader with broad technical, business strategy, and team leadership skills. Record of delivering innovative pragmatic solutions and customer satisfaction to unstructured business and technical challenges at scale.
Dual US/UK citizen relocating back to the USA.

SELECTED CAREER ACHIEVEMENTS

Identity

- ✓ Reduced 100's of Centrica's cloud IAM roles and policies across Azure and AWS into less than fifteen roles, thereby simplifying management while still maintaining reasonable least privilege.
<https://github.com/leswaters/cloudroles>
- ✓ Modernized numerous information security policies, standards, and procedures for Centrica, Vodafone, and MSCI to incorporate process improvements, and to better align with public cloud, identity and access management (IAM), zero trust, and the shifting threat landscape.
- ✓ Implemented tool to automatically extract AWS and Azure role & policy permissions.
<https://github.com/leswaters/AwsServices>

Big Data Analytics

- ✓ Recently led team of 35+ to re-engineer lo-Tahoe's data analytics product from ground up to create a non-technical, user friendly, and extensible machine learning data catalog platform, rivaling Informatica, according to *The Forrester Wave: Machine Learning Data Catalogs, Q4 2020*. **These efforts directly led to company's acquisition by Hitachi Vantara in June 2021.**
- ✓ Designed highly efficient bitcount storage technique to supplement Roaring Bitmaps, dramatically improving key analytics accuracy of low cardinality, high repeat data.
- ✓ Overhauled data model to reduce 240+ SQL tables to just 12 MongoDB collections which simplified and accelerated developer efforts.

Information Security

- ✓ Implemented *Security from the Start* and *Privacy by Design* program for Hitachi Vantara product engineering with multiple security touchpoints and shift-left CI/CD improvements to advance product security postures, reduce security debt, increase developer velocity, and improve customer trust through certifications and best practice attestations.
- ✓ Implemented FAIR risk management framework and risk registers for Hitachi Vantara and Centrica, enabling rapid and informed risk-based business decision making.
- ✓ Directed key technical and process changes with KPIs/KRIs to advance MSCI's independently assessed (by Booz Allen) security maturity posture from 'Industry Basic' to 'Industry Standard'.
- ✓ Developed 40+ security incident playbooks for MSCI, improving mean-time-to-detect (MTTD) by 30% and dramatically reducing mean-to-to-resolve (MTTR) by 60%.
- ✓ Grew MSCI's new financial services security team from 3 to 30+ people, including 24x7 operations, security engineering, and risk management.
- ✓ Achieved ISO 27001 and CyberEssentials Plus certifications for lo-Tahoe.

- ✓ Formed and led Microsoft's first Cryptography team, launched CryptoAPI, created *hResults*, and co-authored patented secure payment solutions with Visa.
- ✓ Served as Microsoft spokesperson in National Research Council Study on Cryptography Export with efforts directly leading to the relaxation of U.S. export controls.

Public Cloud

- ✓ Championed technical and cultural changes at Centrica to accelerate large scale cloud migration of numerous business applications (including 3rd largest SAP globally, eliminating ticket-based IT in favor of guardrail secured self-service enablement).
- ✓ Took ownership of, actively identified, and implemented cloud FinOps changes, saving Centrica over £2.6M annually.
- ✓ Implemented numerous scripts to improve resource and configuration visibility across AWS and Azure, enabling pro-active treatment of potential security weaknesses.
- ✓ Avid contributor to Azure and AWS user documentation.

EXPERIENCE

Vice President – Product Security

Hitachi Vantara (via Io-Tahoe company acquisition), London • August 2021 – Present

Joined via Io-Tahoe acquisition as Managing Director level leader to drive the integration of the Io-Tahoe product into the Lumada analytics suite. Implemented numerous security *Design > Build > Run > Trust* touchpoints to improve the company's product security posture across identity, role-based access control, key management, encryption, trustworthiness, privacy, and engineering.

Chief Technology Officer (CTO) and CISO

Io-Tahoe (subsidiary of Centrica Plc), London • January 2020 – August 2021

Led the turn-around of this Centrica subsidiary's data discovery analytics product which resulted in the company's acquisition by Hitachi Vantara. Set product direction, designed a new user experience, and solved big data challenges at scale utilizing agile, NoSQL (MongoDB), GraphQL, machine learning, and secure CI/CD to meet rapidly evolving customer needs.

- Increased data analytics throughput from MB/minute to GB/minute through architectural improvements and strategic code re-implementations to improve customer experience.

Group Head of Cloud Security

Centrica Plc, Staines, UK • March 2018 – January 2020

Hands on cloud security transformation leader for Centrica Group of Companies (British Gas, Direct Energy, Bord Gáis Energy) across AWS, Azure, and Office 365, overseeing 3M+ cloud objects, enabling the fast secure migration of 100's of applications.

- Launched security detection and correction automation across AWS and Azure using Cloud Custodian, scripts, and cloud-native tools, reducing incident response time to seconds.

Executive Director (Deputy CISO) – Global Head of Cloud and CyberSecurity

MSCI Ltd., London • October 2015 – February 2018

Asked to rejoin MSCI to drive and mature the next generation CyberSecurity and cloud engineering initiatives, and to unify security processes under M&A efforts. Budget management \$18M+.

- Developed automated patching solution with regression testing and rapid rollback, enabling an ongoing "patch everything" policy, reducing risk and technical debt accumulation.

Senior Manager – Infrastructure & Device Security (Deputy role to CTSO)

Vodafone Ltd., Newbury • November 2014 – October 2015

Recruited as planned successor for UK CISO/CTSO role. Drove security strategy, architecture, high-profile IT program delivery, and large security assurance consultancy team.

- Launched new security operations unit and implemented transformational changes for vulnerability management as a BAU activity with self-measurement (KPIs/KRIs) to secure and maintain CAS(T) certification.

Vice President – Information Security & Risk Management

MSCI Ltd., London • January 2012 – October 2014

Recruited to grow the firm's fledgling Information Security practice from 3 to 35+ people.

- Delivered multiple major security technology initiatives including enterprise-wide log data collection & analytics (Splunk), Security Incident & Event Management (SIEM), compliance monitoring & measurement, Intrusion Detection, DDoS protection, Content Delivery Network & WAF (Akamai), and custom security tool and automation solutions.

Prior Experience

Various, Seattle, WA • 1991 – 2011

Almost a decade with Microsoft and multiple dot-com startups in technical leadership capacities.

- Royal Holloway, University of London, Full-Time MSc degree, 2009 – 2010
- Social Motion Corporation, Founder, 2006 – 2009
- Meridian Group of Companies, VP Technology, 2003 – 2006
- NanoVia LP, Co-Founder, 1999 – 2003, [Successfully sold to Hitachi](#).
- Microsoft Corporation, Group/Division Technical Program Manager, 1991 - 1999

EDUCATION

MSc Information Security with Distinction, Royal Holloway, University of London, UK

BSc Computer Science with Distinction, Worcester Polytechnic Institute, Worcester, MA

TECHNICAL & BUSINESS REPERTOIRE

- Identity and Access Management ♦ Role Based Access Control (RBAC) ♦ Encryption and Key Management ♦ Information Security Best Practices (ISO 27000, PCI DSS, ISF, NIST 800-53, FedRamp) ♦ Privacy, Risk, & Compliance Frameworks (FAIR, PCI DSS, SOX, NIST, GDPR, CCPA, HIPAA) ♦ Secure Product Development & Trustworthiness ♦ Cryptographic Protocols
- AWS and Azure cloud ♦ Role & policy management ♦ AWS CloudWatch ♦ Azure Sentinel ♦ Azure Active Directory ♦ Akamai CDN & WAF ♦ API Development (REST, GraphQL) ♦ Databases (SQL, NoSQL, MongoDB, Snowflake) ♦ Scripting & programming (PowerShell, JavaScript, C++, node.js, 80x86 assembly, ASIC micro-coding) ♦ Infrastructure as Code
- Employee Mentoring & Development ♦ Cross-Discipline Stakeholder Management ♦ Budget Management ♦ Product & Service Pricing ♦ Transformation Program Leadership ♦ Cloud cost management (FinOps) ♦ Payment Systems ♦ Data Management Technologies.
- Inventor on several eCommerce and cryptography patents.