

Keith Lawson

Professional Summary

Innovative and results-driven technology executive with 15+ years of leadership in engineering, cybersecurity, and digital transformation focused on solving complex problems. Passionate about leveraging emerging technologies to strengthen security, efficiency, and business outcomes. Proven track record of driving technology modernization, developing secure and scalable software solutions, and leading high-performance engineering teams. Deep expertise in cybersecurity strategy, risk management, full-stack development, and IT infrastructure security. Adept at transforming IT infrastructure, cloud adoption and enhancing interoperability in complex enterprise and healthcare environments.

Work Experience

London Health Sciences Centre | London, ON Chief Information Security Officer | July 2023 – Present

- As a direct result of my successes in building a leading-edge security program as Manager of security operations I was recruited into the role as the first ever CISO at London Health Sciences Centre to build out a full Managed Security Services Provider for healthcare.
- Developed a comprehensive cybersecurity program covering 32 hospitals in Ontario consisting of a Security Operations Centre, Governance Risk and Compliance team resulting in over \$2.5 million cost savings and reduced risk through introducing, implementing and managing an incident response program that was previously non-existent.
- Oversee security operations engineering and innovation, introducing Continuous Integration for automated threat detection, threat intelligence sharing, vulnerability management and security operations reporting resulting in 80% decrease in mean time to respond, 40% decrease in mean time to resolve and clear understanding of organizational risks so they could be addressed reducing high risk vulnerabilities by 80%.
- Collaborate with multiple cross-functional committees to ensure consistent policies and standards across technology projects, and systems delivering consistent cybersecurity governance across all customer sites. This resulted in risks being identified and mitigated at earlier stages avoiding costly retooling and reconfiguration and reducing overall organizational risk from technology.
- Developed an agile security operations framework, driving continuous improvements to align with evolving threats resulting in reduction of mean time to respond from hours to an average of 17 minutes, a 25% reduction of major incidents with 0 service outages 5 years and counting.
- Consult with business stakeholders including hospital executive, clinicians and the Ontario government to elevate awareness of risk management and compliance, fostering a culture of cybersecurity throughout the provincial healthcare system.
- Enable business leaders to better understand cybersecurity risks and lead their teams in reducing those risks resulting in a 5% decrease of cybersecurity incidents.
- Developed and implemented a comprehensive cybersecurity training and awareness program fostering culture of awareness and diligence throughout the organization.
- Developed a modern ongoing cybersecurity education program resulting in increased cybersecurity awareness for all staff which increased cybersecurity reporting rate by 70% leading to a safer organization by avoiding incidents as a result phishing.
- Increased incident reporting rates translated to improvement in the performance of the security operations team by providing them employee reported data to investigate and conduct proactive mitigation moving security operations from reactive to proactive.

London Health Sciences Centre | London, ON
Manager – Cybersecurity Operations (SOC) | March 2022 – July 2023

- Built and led security operations centre (SOC) and Governance, Risk and Compliance (GRC) teams from the ground up, providing 24x7x365 managed cybersecurity services for over 30 healthcare organizations resulting in cybersecurity incident response and governance capabilities that were previously non-existent
- Built SOC incident monitoring program resulting in investigation of over 800 cybersecurity incidents per year that were previously unmanaged. Our investigations led to being proactive in defeating attacks that otherwise would have led to major incidents (e.g. ransomware) causing service outages.
- Designed and managed incident response program, minimizing impact during major cybersecurity breaches reducing the average major incident response time from 3 weeks to 72 hours which translated to 0 service disruptions from cybersecurity incidents.
- Acted as incident response commander during significant cybersecurity breaches, coordinating efforts, cross functional discussions and decisions during cybersecurity incidents resulting in minimizing operational impact of cybersecurity incidents and privacy breaches taking time to recover from weeks to days.
- Introduced agile development methodologies to security operations through leveraging git for security operations engineering team coupled with continuous integration/deployment which resulted in full version history on security tools, threat intelligence rules, and tool integration as well as automated testing and deployment of custom built security solutions.
- Supervised teams responsible for endpoint detection and response (EDR), vulnerability management, digital forensics, incident response and security information and event management (SIEM) by introducing new industry leading technologies giving the security operations team the tools and processes needed to do their jobs more effectively delivering a fully function 24/7/365 Security Operations Centre (SOC) capable of managing over 1,000 incidents per year across 11 customer sites with 5 FTEs.
- Drove governance and educational initiatives, including policies, standards, procedures, business continuity/disaster recovery planning, and cybersecurity training with phishing simulations leading to increased organizational awareness reducing risk of phishing and other human based attacks resulting in a 70% increase of employee reporting of cybersecurity incidents.
- Oversaw financial aspects of security operations, managing technology and staff budgeting to optimize resource allocation resulting in a small, efficient, agile team capable of providing service to all 11 customer sites introducing managed security services to 9 sites that did not previously have services with an operating cost reduction of over \$2.5 million dollars per year.

St. Joseph's Health Care London | London, ON

Manager – IT Security, Engineering & Operations | December 2015 – March 2022

- Managed a team of over 30 engineers and 2 leaders, including indirect reports of ~50 staff managing IT engineering, infrastructure and procurement modernizing IT infrastructure increasing the agility of IT for the business resulting in a 25% increase of service requests and 10% increase of project delivery.
- Created and led a team of software engineers in designing, building and deploying web-based applications tailored to healthcare and research used to improve clinical workflows, clinical research and data security resulting in generating revenue of over \$1.5 million per year.
- Replace obsolete waterfall practices with modern agile software development lifecycle practices including git version control and continuous integration/deployment via gitlab reducing time to production and increasing software product delivery by 50%.
- Spearheaded the development of an enterprise urgent messaging system, replacing 4000+ legacy pagers with a secure digital platform eliminating a significant business risk and delivering a product that was monetized to generate revenue for the business resulting in \$500k annual revenue \$800k operational savings and over \$1 million in capital savings.
- Managed 24x7x365 operations of two production data centers, supporting IT infrastructure for two major healthcare organizations in London, Ontario providing tier 3 (99.982% uptime) data centre services to a large healthcare system.

- Led infrastructure modernization projects for Microsoft Exchange, Office 365, Azure, VMware ESXi, and VMware Horizon virtual desktop replacing aging legacy systems delivering modern, sustainable solutions that could support the business into the future.
- Oversaw capital and operating investments for data center and endpoint infrastructure, optimizing resource allocation, reducing IT infrastructure costs resulting in ability to expand IT footprint without cost increases increasing private cloud capacity by 25% with no additional capital investment.

St. Joseph's Health Care London | London, ON

Senior Infrastructure Engineer | November 2014 – December 2015

- Designed and implemented software development life cycle (SDLC) processes and technologies, introducing git version control and automated deployment resulting in increased quality of code.
- Lead engineer on open-source full stack software development directing team of developers building full stack applications and healthcare systems integrations.

Additional Experience

St. Joseph's Health Care London | Infrastructure Engineer – Linux/Unix

- Administered Unix systems across various platforms including Solaris, SCO, HP/UX, OSF, AIX, and Linux distributions such as Debian, Red Hat, and Suse

Libertas Technologies Inc. | President & Founder

- Founder of software development company specializing in custom solutions built on open-source software stack
- Developed a custom healthcare imaging system used in human clinical trials under Libertas Technologies, enhancing data accuracy and streamlining trial processes

St. Joseph's Health Care London | Technical Analyst – Healthcare Systems Integration

St. Joseph's Health Care London | Web Developer

St. Joseph's Health Care London | Computer Support Specialist

Skills

- **Cybersecurity & Risk Management:** Incident Response, Security Information and Event Management (SIEM), Vulnerability Management, Endpoint Security, Zero Trust Architecture
- **Software Engineering & Development:** Full-Stack Development, SDLC, DevOps, API Security, Cloud-Native Applications, Perl, C, Python, git
- **Infrastructure & Cloud Security:** Microsoft Azure, Office 365, VMware, Linux/Unix Administration, Data Center Management, Identity & Access Management (IAM)
- **Leadership & Innovation:** Strategic Planning, Team Leadership, Budgeting, Policy Development, Regulatory Compliance (ISO 27001, HIPAA, NIST)

Education

Master of Science in Cybersecurity | Capitol Technology University

Bachelor of Science in Computer Science | University of Western Ontario

Certifications and Membership

[Neural Networks and Deep Learning Certificate](#) | Coursera | 2025

[Improving Deep Neural Networks Certificate](#) | Coursera | 2025

[Structuring Machine Learning Projects](#) | Coursera | 2025

Upsilon Pi Epsilon (UPE) Honor Society | Association for Computing Machinery | 2024

Certified Information Systems Security Professional | ISC2 | 2020

Publications

Keith Lawson, 'Secure email': A losing battle CISOs must give up: [link](#)

Keith Lawson, Naresh R. Singh "Cybersecurity Considerations", in Book Innovative Collaboration in Healthcare, edited by Hironobu Matsushita, Carole Orchard, Springer, Year. DOI: [link](#).

Volunteer Experience

Victorian Order of Nurses | Board Member

Victorian Order of Nurses | Finance Committee Chair and Treasurer

Victorian Order of Nurses | Finance Committee Member