



## WILL LIPFORD

### Summary

Innovative Technical Lead specializing in Automation DevOps, with over two decades of experience spanning Full Stack Development, NMS & IP Engineering, and Application & Middleware Integration.

A seasoned technical professional with deep expertise in systems implementation, integration, administration, and support, offering the following key strengths:

- **Source of Truth Systems:** Skilled in configuring, deploying, training, and supporting Source of Truth systems.
- **UNIX Administration:** Advanced proficiency in UNIX system administration.
- **Database Management:** Experienced in managing complex relational and non-relational data structures.
- **NMS Performance Systems:** Hands-on experience with Solarwinds, OpenNMS, and Splunk NMS.
- **Software Development:** Extensive background in agile software development, configuration, deployment, and training, leveraging tools such as Ansible, Git, CI/CD Pipelines, Nautobot, Grafana, and Rundeck.

Recognized as a dependable team player and innovative thinker, I am known for my punctuality, integrity, and strong sense of responsibility. My strengths include effective communication, conflict resolution, and facilitating the onboarding of new managers and staff. I have a proven track record of applying technical expertise across diverse applications and delivering results through collaboration with both customers and management. As a systems integration specialist, I focus on custom monitoring tools, company branding, off-the-shelf modifications, cutting-edge solutions, analytics, and automated reporting. Highly motivated and adaptable, I excel in communication, requirements gathering, problem-solving, and negotiation — consistently contributing to the success of every project I support.

### Certifications

#### *Network to Code*

- Network Programming and Automation, *Oct 2023 – Present*
- Collaborative Workflows with Git and GitHub, *Oct 2023 – Present*
- Nautobot Config Compliance & Remediation w/ Golden Config, *Dec 2024 – Dec 2024*
- Automating Nautobot with Python & Ansible Workshop, *Dec 2024 – Present*
- Nautobot Extensibility Workshop, *Dec 2024 – Present*
- Automating Networks with Python II, *Apr 2025 – Present*
- SolarWinds Certified Professional, *Oct 2015 – Oct 2020*
- PeopleCert ITIL 4 Foundation Certificate in IT Service Management, *Nov 2024 – Nov 2027*

### Experience

#### *Transaction Network Services*

##### **Technical Lead, Automation Dev Ops**

**January 2022 - Present**

*As a Technical Lead, Automation DevOps, I currently spearhead a comprehensive transformation of our DevOps core structure. This pivotal initiative involves:*

- **Overhauling Data Repositories:** Leading the overhaul of our source of truth data repositories, which includes IPAM, DNS, SOT, and Code Revision repositories. This effort aims to centralize data management for improved efficiency and reliability.



- **Standardizing Application Orchestrations:** Implementing standardized DevOps application orchestrations that leverage Ansible for device configuration management and MuleSoft for seamless application integration. These orchestrations streamline workflows and enhance system efficiency.
- **Documentation and Compliance:** Establishing and standardizing documentation practices through GitLab and MkDocs. This ensures comprehensive records of system configurations and changes. Additionally, I manage compliance efforts and activity tracking through Splunk to enhance security and compliance.
- **Large-Scale Implementation:** Leading a large-scale implementation that replaces a significant portion of our core systems. This strategic shift aligns with our company's zero-touch provisioning strategy, enhancing system provisioning and management.
- **Security and Reputation Maintenance:** Ensuring that all system modifications adhere to our stringent high-security standards, preserving our company's esteemed reputation for data integrity and security.

I am currently at the forefront of driving a transformative project to enhance our DevOps core structure, leading to improved operational efficiency, data integrity, and system security. My dedication to upholding the highest standards of security and performance is instrumental in advancing our company's success.

#### Transaction Network Services

Sr. NMS Engineer

January 2015 - January 2021

*Network Management Platform re-architecture:*

- Deploying SolarWinds solution for SMNP/ICMP polling and NCM management. Integration work with a BMC Custom Remedy environment
- Developed and deploy a Network Automation engine with mongo DB asynchronous communication with Remedy.
- Design and develop NMS ( OSS ) solutions in accordance to stated requirements or set objectives. Document and validate requirements where necessary.
- Deploy, integrate and validate NMS solutions and subsequently provide administrative and operational support on a 365x7x24 basis. Provide L2, L3 and occasional L1 support for NMS related outages, incidents and user requests.
- Maintain concurrency and integrity of NMS systems in production. Plan for and execute on product life-cycle upgrades including validation and deployment of enhancements, bug fixes and vendor patches.
- Report vendor product issues to vendors and subsequently manage them through their resolutions.
- Identify functional gaps, bottlenecks and inefficiencies. Report them and subsequently collaborate with vendors for potential improvements.
- Analyze business and departmental requirements and provide budgetary input for Capex and Opex forecasts.
- Collaborate with internal and external stakeholders for project related and operational activities.
- Plan for and actively support business continuity, disaster recovery, compliance and audit related initiatives.
- Plan for and manage small scale departmental projects from initiation through closure.
- Create and maintain design documents, user guides, test and validation plans and operational documents such as MOP or SOP.
- Provide subject matter expertise and consultation for NMS topics.
- Provide coaching, guidance and training to NMS team members covering the area of subject matter expertise.
- Conduct user training as needed.
- Plan and publish work plans, and report on progress and concerns on a regular basis.

Senior Application Architect

June 2000 - March 2015



- Deployed IT solutions in accordance with approved standards and strategies, focusing on financial and operations sectors.
- Offered consultative guidance to junior architects in financial data modeling products and integration strategies.
- Provided analytical, technical, and business expertise to enhance operational efficiency, end-user response time, and employee productivity.
- Implemented architectural plans and infrastructure maps, designing solutions for optimal performance, scalability, and reliability.
- Supported and trained colleagues in understanding, propagating, and implementing business applications.
- Generated reports on understudy performance and conducted training sessions to enhance their IT application knowledge.
- Served as the primary integration developer for more than six major applications, using both cutting-edge and legacy languages.
- Managed end-to-end website development for custom applications without web access.
- Advised the Enterprise Architecture team on efficient and cost-effective IT product deployment.
- Acted as a technology expert, driving architecture, design, development, and deployment activities for specific projects.
- Collaborated with in-house and outsourced development teams to complete projects.
- Maintained various applications and provided support during business and off-hours to meet service level commitments.
- Coordinated the escalation of unresolved trouble tickets to higher management when necessary.

**Senior Software Engineer****January 2005 - January 2007***Key accomplishments include:*

- Installed and configured Remedy Release 5.x.
- Developed web services to seamlessly extract data from other application APIs into Remedy.
- Successfully created and maintained integration between Remedy and Visionael.
- Implemented Single Sign-On functionality between Windows Active Directory and Remedy via the LDAP Protocol.
- Transformed completed Remedy forms into .jsp format and published them within the integrated Remedy mid-tier software.
- Designed and implemented workflow solutions to meet end user requirements, spanning over 25 forms and utilizing filters and active links.
- Configured and installed Remedy Distributed Server Option to link our US and UK servers, enabling a "follow the sun" support model.
- Established and maintained disaster recovery, hot standby, cold standby, and testing platforms.
- Produced over 100 user reports using Crystal Enterprise and integrated data from the Remedy (ARS) database and the network inventory system (Visionael).
- Maintained and generated various CR reports for billing systems, as well as engaged in multi-database mining collaboration.

**Jr. Systems Engineer****July 2000 - February 2002**

- Created custom scripts for NMS platforms, specifically for Netcool Administrator.
- Offered Tier 2 support for OpenView.
- Designed custom applications for Network Operations, with a focus on comprehensive SLA reporting.



## PCCW

### Software Engineer

2006 – 2007

- I played a pivotal role in a critical project involving the migration of a custom-built application to an off-the-shelf ticket system, Remedy. I took charge of the installation, configuration, and the development of integrations with various back-office systems.
- I also led the effort in all back-office integrations and assumed responsibility for training and documentation, ensuring all PCCW employees were proficient with the new system.

## Owl

### Opensource Testing

2004 - 2005

Revised source code to establish an efficient invoicing delivery system for my company, actively engaging in rigorous code testing throughout the development process to ensure its reliability and accuracy.

## Stratford University

### Jr. Systems Administrator

October 1999 - July 2000

- While a full-time student, I served as a Dean's assistant and graduated with Magna Cum Laude honors. In this role, I supported System Administrators in various daily activities, including cable management, application installations, drive duplication, hardware setups, virus protection implementation, and desktop support.

## Education

### Strayer

BS, Computer Science, 2005 - 2007

## Stratford University

Associates, Computer Programming , 1999 - 2003