MARK LAPOINTE

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SUMMARY

An accomplished and results-driven Principal Software Engineer with extensive experience in high-performance applications, software solutions, and full life cycle configuration. Established capabilities in driving quality and consistency throughout all phases of software development projects. Partners with developers, analysts, QA, and engineers to create cutting-edge engineering solutions, optimizing code and producing user-friendly, scalable, and bug-free software. Extensive expertise in large system architecture development as well as network design, configuration, and automation. Serves as a key contributor to the long-term success of the organization.

**Solutions Engineering, Testing, & Optimization | SDLC Strategy & Leadership | Mobile & Cloud Solutions
Data-Driven Applications | Reliability & Scalability | Automation | Enterprise Software Development
Global Project Management | Security & Manufacturing Operations | Network Design & Development**

TECHNICAL SKILLS

Artificial Intelligence: LangChain, LangGraph, LangSmith, Ollama, AWS Bedrock, Anthropic Claude, Google Gemini, Prompt Engineering, Vector Storage Population
Web Development Client Technologies: React, Angular, jQuery, AJAX, CSS, HTML, JSON, YML, RAML, XML, XSLT, REST
Web Development Server Technologies: JEE, Spring, Apache Commons, Apache Tomcat / HTTP, Nginx, Microsoft IIS, REST, Axis 2
Programming Languages: Python, Java, JavaScript, ECMAScript, Node.js, TypeScript, Golang, Perl, PHP, Visual Studio 6.0, Visual Studio .NET, Shell Scripting (CSH, Bash, Korn), BASIC, Turing, Miranda (Haskell), Pascal, C / C++, J2EE, Batch
General Development Technologies: IntelliJ, Eclipse, Make, Maven, GCC, LLVM, Ant, Jenkins, TeamCity, RAML, Visual Paradigm, Jira
Database Platforms: MySQL, MemSQL, Oracle, MS SQL, MongoDB, Neo4j, Redis, Cassandra, Linux, Mac OS X, FreeBSD, OpenBSD, NetBSD, Microsoft Windows, Solaris
Orchestration: VMware, Xen, XCP-ng, FreeNAS / TrueNAS, Docker, Podman, B-hyve, AWS, GCP, Terraform, Chef, Ansible

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EXPERIENCE

ACAMS   Miami, Florida
Principal Software Engineer... 2020-2025

- Implemented multi-node Kubernetes cluster to build next generation of product offerings to scale to large active user base.
- Utilized accessible LLM / API models and libraries to create AI chatbot service with traceability to manage user CRUD requests.
- Created Python scripts to automate key rotation and correct and enrich data.
- Built custom containers to implement message-based service-oriented architecture, utilizing Paxos and Raft, to manage scheduled tasks and user-generated requests for reports.
- Supported, maintained, updated, and expanded existing product offerings.
- Implemented dictionary-based validation, using regular expressions library, that eliminated over 90% of all security concerns found by third-party security testing done by Booz Allen.

REDWOLF SECURITY   Toronto, Ontario, Canada
Principal Software Engineer 2019-2020

- Improved clients' cyber defenses by designing systems and services to simulate threats, monitoring customer sites for security and performance concerns, and recommending improvements to management.
- Designed and integrated new core framework features used for scanning, monitoring, and reporting on customer systems, including new testing capabilities, new functionality to extend framework, and expanding capability to report new issues.
- Created systems and services in the form of virtual machines and Docker containers that generated attack traffic and reported on what had been discovered.

AKAMAI TECHNOLOGIES, INC (ACQUIRED PROLEXIC TECHNOLOGIES)   Fort Lauderdale, Florida
Senior Applications Software Engineer 2007-2019

- Served as project manager, lead software engineer, and / or team member on dozens of application development projects.
- Adhered to high-quality development standards while delivering technology solutions on time and on budget.
- Employed cutting-edge technologies to collaborate on projects.
- Analyzed web traffic to find patterns that did not conform to expected behavior to identify malicious actors.
- Designed system to analyze web client traffic to determine if client was using real web browser and to block client if it did not pass validation; maintained system to manage customers and configurations on network.
- Generated graphs to identify issues on network, anticipate attacks, and start investigations when appropriate.
- Enabled customers to view network, services, and contact information; identify threat actors; and more.
- Created standardized descriptions of all objects utilized to have built-in validation based on attribute and class dictionary.

ADDITIONAL EXPERIENCE

DATAREALM, INC., Windsor, Ontario, Canada, **Senior Solutions Specialist,** 2004-2007. Devised and integrated solutions to resolve production problems, resulting in increased efficiency and productivity, working independently and collaboratively with a team of 12. Trained clients and employees and implemented software solutions. Developed and implemented real-time production system solution for Ford Motor Company to replace VAX-based system known as MMS for 700+ machines. Integrated plant-wide factory visualization and monitoring system. Promoted lean manufacturing methodologies and increased efficiency by creating applications that allowed OPC services to communicate with PLCs and read values to capture events in order to present in real time.

EDUCATION

UNIVERSITY OF WINDSOR, Windsor, Ontario, Canada
B.S., Computer Science, 2004

PROFESSIONAL DEVELOPMENT

Kaggle 2025: 5 Day Gen AI Intensive | *Hurricane Electric 2019: IPv6 Certification Sage*
Erion 2013: Implementing and Securing IPv6 for Developers | Black Hat 2013 Training: The Shellcode Lab
Black Hat 2010 Training: Mitigating DDoS Attacks by Cisco Systems | Black Hat 2008 Training: Tactical VoIP
Activplant Training 2005: Certified in Activplant Foundation SDK