Christopher Lombardi

Principal Software Engineer

Technical Leadership • Architecture • Cloud & Distributed Systems • DevOps Integration

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Summary

Principal Software Engineer with 10+ years of progressive experience in software development, architecture, and system-level problem-solving. Demonstrated expertise in designing scalable, secure, and maintainable software solutions within budget and time constraints. Proven ability to lead cross-functional teams, define technical standards, and drive initiatives across architecture, DevOps, infrastructure, and cloud technologies.

Experience

Confluence Technologies Inc. — Pittsburgh, PA / Remote | 12/03/2015 - Present

- Led architecture and technical direction for a core product area, serving as a liaison between engineering, product, and executive stakeholders.
- Designed system architecture to meet business and service-level objectives across quality metrics including performance, scalability, reliability, availability, extensibility, maintainability, manageability, and security.
- Created and documented architecture diagrams and design decisions for development and leadership visibility.
- Established and enforced development patterns, best practices, and codebase structure across repositories and projects.
- Translated complex system challenges into manageable work breakdowns and technical deliverables.
- Integrated CI pipelines for build, test, and artifact packaging, enabling consistent and automated delivery processes, and enforcing standardized code practices.
- Identified technical risks, system bottlenecks, and architecture trade-offs, factoring in cost, team capacity, and cloud infrastructure utilization.
- Led troubleshooting of difficult-to-replicate bugs and performance issues in distributed systems.
- Designed secure system architectures aligned with SDLC and deployment-stage protections.
- Directed and reviewed technical documentation and solution recommendations.
- Worked with Azure kubernetes, managed cloud services, NoSQL databases, message queues, authentication systems.
- Contributed to infrastructure cost optimization and team structure planning to maximize delivery momentum.
- Provided mentorship and guidance to technical leads and engineers while contributing to development organization strategy.

Problem Solutions LLC — Johnstown, PA | 05/13/2013 - 11/30/2015

- Contributed to software engineering and designs for production environments.
- Contributed to devops and took on contracted deployment responsibilities for key project initiatives to facilitate business requirements.
- Provided mentorship and guidance to junior engineers with knowledge sharing sessions including 1-on-1 meetings, lunch 'n' learns, and documentation.

Technical Skills

- Architecture & Patterns: System design, cloud-native architecture, distributed systems, monolithic and micro service system design and management, design patterns, performance tuning
- Cloud & DevOps: Azure, Azure Devops CI/CD pipelines, Kubernetes, Octopus Deploy, Auth0
- Tools & Platforms: RBMS, NoSQL, key-value stores, message brokers, docker, authentication and encryption systems
- Networking & Security: DNS, TCP/IP, network architecture, system security across SDLC
- Leadership & Collaboration: Cross-team alignment, mentoring, technical documentation
- Languages: C#, SQL, MQL, KQL, Powershell, YAML, Terraform, Typescript, Javascript
- Frameworks: .NET Core, Aurelia, React, XUnit

Accomplishments

- As a lead software engineer, I led a team of developers to re-implement a distributed, multi-tenant, cloud-based application from the ground-up.
    - Defined best practices, solutions, technologies, team processes to facilitate a consistent, shared understanding for optimizing development on a multi-national team.
    - Interviewed, mentored, successfully integrated multiple senior engineers concurrently across two projects and 3 time zones.
    - Analyzed product requirements, designed many new solutions, and re-designed legacy solutions to optimize for performance, efficiency, and extensibility with new technologies.
    - Aligned the team on key technical requirements: team-wide knowledge sharing practices, unit test quality, test coverage, microservice responsibility integrity, code responsibilities.
- As a lead software engineer, I led a team of developers and QA engineers to successfully re-implement critical components of a distributed, multi-tenant, cloud-based solution to reduce the distribution of compute operations by one order of magnitude to improve performance by leveraging a shared cache of instructions to process.
    - Influenced design.
    - Defined and enforced software best practices with the team's buy-in and shared understanding.
    - Defined testing patterns.
    - Mentored both QA and Software Engineers.
- As a software engineer, I designed, proposed, and led an organization-wide initiative to showcase, share and distribute product technical knowledge after a merger and helped to spread technical knowledge and facilitate communications in-between product development teams.
- As a software engineer, I designed and implemented critical components of a distributed, multi-tenant cloud-based ETL tool that processed files sent by users in a configurable way that both reduced hosting costs and maximized file throughput to satisfy clients and budgets.
    - Defined testing patterns.
    - Played a critical role in creating, designing, building, deploying, and maintaining the ETL application with 20 concurrent tenants and hundreds of concurrent users to process tens of thousands of files, and several terabytes of data over our first year at launch.

Education

- Bachelor’s of science in computer science from the University of Pittsburgh at Johnstown in May, 2014.