Christopher Lombardi

Principal Software Engineer

Technical Leadership • Architecture • Cloud & Distributed Systems

(571) 882-1798 Christopher@ChristopherVLombardi.com Eastern Time Zone

Summary

Principal software engineer with 12+ years of progressive experience in software development, architecture, and enterprise-software design and implementation. Demonstrated expertise in designing scalable, distributed, secure, and maintainable software solutions within budget and time constraints. Proven ability to lead cross-functional, multi-national teams, define technical standards, and drive initiatives across development, architecture, DevOps, infrastructure, and cloud technologies.

Experience

Confluence Technologies Inc. — Pittsburgh, PA / Remote | Principal Software Engineer | 12/07/2015 - Present

- Led architecture and technical direction for a core product area, serving as a liaison between engineering, product, and stakeholders.
- Provided mentorship and guidance to technical leads and engineers while contributing to development.
- Championed adoption of AI-assisted development (GitHub Copilot and Claude) across 4 teams by organizing training, and facilitating regular knowledge-sharing sessions to promote safe, efficient, and innovative coding practices.
- Designed and implemented system architecture to meet business and service-level objectives across quality metrics including, but not limited to: performance, scalability, reliability, availability, extensibility, maintainability, manageability, and security.
- Designed, implemented, worked effectively with and led team members to implement feature sets.
- Established and enforced standardized development, inter-team communication, and testing practices.
- Created and documented architecture diagrams and designs for development and leadership visibility.
- Established and enforced development patterns, best practices, and codebase structure across multiple repositories and projects to enable team members to support all products.
- 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 and enhanced existing and future design solutions to be resilient to these issues.
- Designed secure system architectures that aligned with SDLC and deployment-stage protections.
- Created and reviewed technical documentation and solution recommendations.
- Contributed to infrastructure cost optimization and team structure planning to maximize delivery momentum.

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

- Contributed to the design and implementation of cloud-based, enterprise applications.
- Contributed to devops and took on contracted deployment responsibilities for key product 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 technical documentation.

Technical Skills

- Architecture & Patterns: Enterprise applications, cloud-native architecture, distributed systems, monolithic and micro service system design and management, Vertical Slice Architecture, Domain Driven Design, S.O.L.I.D. principles, Immutability, Logging, CQRS, Event Sourcing, RESTful API Design
- Cloud & DevOps: Azure, Azure Devops CI/CD pipelines, Kubernetes, Octopus Deploy, Auth0
- Tools & Platforms: Claude Code, Github CoPilot, Visual Studio, VSCode, Azure SQL Server, MongoDb Atlas, Application Insights, Service Bus (distributed messaging), Blob Storage, Docker, Redis, Auth0, SignalR, Azure Functions, Azure Logic Apps
- Networking & Security: gRPC, APIs, DNS, TCP/IP, Auth0, Veracode, NSGs, WAF, OWASP
- Leadership: Cross-team standardization, mentoring, technical documentation, Agile Methodologies, 1-on-1 meetings, delegation, defined clear goals and expectations, achievement recognition.
- Languages: C#, SQL, Typescript, Javascript, Powershell, YAML, Terraform, MQL, KQL
- Libraries and Frameworks: .NET Core, XUnit, NUnit, React, Aurelia, Orleans, Dapper, Entity Framework, gRPC & Protobuf, CommandLineParser, MongoMigrations, Quickgraph, Serilog, Polly, Windward/Fluent, Mapforce, NCalc

Professional Accomplishments

- As a lead and principal 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 across multiple projects.
  - Interviewed, mentored, successfully integrated multiple senior and lead 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.
  - Collaborated with team-members to define and enforce software best practices.
  - Influenced design to improve performance and efficiency.
  - Defined testing patterns to promote the ability to fully cover all business-scenarios.
  - 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-processing throughput to satisfy clients and budgets.
  - Played a critical role in creating, designing, building, deploying, and maintaining the ETL application that on-boarded 20 concurrent enterprise clients 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.