(310) 227-0186
Redondo Beach, California
markl.nz70@gmail.com
https://markl.nz
https://linkedin.com/in/marklnz

MARK LAWRENCE

Lead Software Engineer/Architect

PROFILE

Proven software engineering technical leader with an exceptional 30-year track record of delivering scalable products and solutions, from startup initiatives to multimillion dollar enterprise programs. My experience combines deep technical expertise with leadership capabilities to drive innovation and mentor high-performing development teams.

EDUCATION

Bachelor of Science

Victoria University of Wellington, Wellington, New Zealand

KEY SKILLS

- Web Frontend (HTML, CSS, JavaScript, TypeScript, Blazor WASM, React.js, Angular)
- Backend (C#, .Net 5+, .Net Core, ASP.Net Core, Entity Framework Core, ASP.Net MVC, .Net Framework)
- Cloud Services (Microsoft Azure - Azure App Services, Azure Functions, Azure Kubernetes Service)
- Architecture Patterns and Styles (Microservices design patterns, Domain Driven Design, Clean Architecture, CQRS, Event Sourcing, SOA)
- Data storage technologies: Azure SQL/SQL Server, Cosmos DB, SQL, ER Data Modelling
- DevOps: Azure DevOps, GitHub, Git, CI/CD, Team Foundation Server
- Methodologies: Agile, Scrum, Kanban

PROFESSIONAL EXPERIENCE

Lead Software Engineer

07/2022 – 08/2025

Tobii Dynavox, Redondo Beach, CA (remote)

- Provided technical leadership to a team of 13 engineers working on the Boardmaker software product, a special education solution with over 900,000 users.
- Technical liaison for other engineering teams, attending weekly meetings discussing current work and coordinating efforts across teams.
- Initiated a future-state migration of the Boardmaker desktop applications from a legacy Electron-based design to a future-proof architecture based on .Net MAUI.
- Led the engineering team in introducing new development practices and refining existing ones. Fully defined the use of Git flow for the team, and improved versioning practices through use of semantic versioning, automated via build pipelines.
- Responsible for managing the team's MS Azure resources. Managed cost saving efforts, including a reduction in database costs of over $8000 per month, a recent reduction in cost for web image search services that is projected to save more than $65,000 over the next year, and other resource optimization efforts.
- Overhauled the team's Azure DevOps build and deployment pipelines, including the addition of GitHub Advanced Security scans in all builds. This led to more reliable deployments, raising the security posture of the team, and improving the quality of software releases.
- Responsible for implementing updates addressing more than 30 high and critical security concerns raised after a third-party security audit. Took charge of resolving these issues and made the required changes so that currently all but four technical issues have been resolved.

Development Lead/Software Architect

01/2013 – 07/2022

ESL, Lower Hutt, New Zealand

- Full stack software developer and architect, responsible for leading in-house software development team at Eyede, working predominantly with Microsoft technologies on complex web-based applications.
- Worked as architect and principal developer on a next generation web application using Microsoft's Blazor Web Assembly application framework, running on .Net 6. This project was a replacement for a legacy Asp.Net MVC monolith application.
- The architecture of this solution is based on a microservices back end, with Blazor WASM being used to build a SPA web client. I designed and implemented the UI using Github's Primer CSS framework, and the back-end services leverage CQRS and Event Sourcing patterns, and are hosted on Azure, using Azure Kubernetes Services and Azure App Services as well as RabbitMQ for intra-service messaging.

- The first element of this project that reached production was a "trip processing" service which, when compared to the legacy product, resulted in throughput increases of 600%.
- Oversaw and collaborated with senior developers in building next generation multi-tier web applications for two other customers, using Angular, TypeScript, JavaScript, HTML 5 and CSS 3, backed with WebAPI components using ASP.Net Core, Entity Framework Core and SQL Server. Both solutions replaced legacy Asp.Net MVC solutions that Eyede also maintained.
- I configured and managed Eyede's internal Team Foundation Server deployment. I also developed the team's DevOps processes and procedures, using TFS, Team Build and Octopus Deploy. I migrated Eyede's internal TFS based DevOps tooling to Visual Studio Online (now Azure DevOps), with Git for version control and leveraging Azure DevOps pipelines for build and deployment.

.Net Solutions Architect
07/2007 – 01/2013

Optimation, Wellington, New Zealand

- Built Optimation’s reusable .net software architecture and reference implementation, using ASP.Net MVC in C#, along with SQL Server Entity Framework for data persistence, utilising Domain Driven Design and Command Query Responsibility Segregation principles, with front end web pages built using ASP.Net MVC, HTML5, JavaScript with jQuery and CSS3 with Bootstrap.
- Served as technical lead and architect on .net projects for Optimation, all built on the archetype "reference architecture" using the technologies listed above.
- Configured, administered and managed Optimation’s Team Foundation Server environment, including process customization and end user training.
- Designed solutions and established effort estimates in pre-sales situations.
- Performed technical architecture and delivery reviews for several high-profile customers, including New Zealand’s state-owned bank, Kiwibank.

PREVIOUS EXPERIENCE

Please see my website or my LinkedIn profile for details of my earlier work experience

Application Architect
1994-1996, 1998-2007

EDS (New Zealand) Ltd

Analyst/Programmer
1997-1998

Queensland Rail, Brisbane, Australia