Ian Lamb

Senior Software Engineer
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SUMMARY

Senior Frontend/Fullstack Engineer with a knack for building elegant, usable web interfaces. 10+ years of experience delivering solutions in enterprise environments. Effective and pragmatic leader for small teams.

WORK EXPERIENCE

Senior Software Engineer @ Improbable

Canada (Remote) | January 2020 – Present

- Lead and mentor a small cross-cutting team that builds frontend web tools for managing game services.
- Architected a real-time event service that allows pre-scheduled events to automatically re-configure a live-service game.
- Established best practices and shared libraries that provide UX and development consistency across different frontend experiences.
- Lead the development of the management interface for a game-agnostic, skill-based matchmaker service that provides high-fidelity queue configuration.
- Designed and developed the login and administrative experiences for a player auth and identity provider, enabling cross-platform gameplay and account-linking.
- Orchestrated and deployed an in-game chat service using Ejabberd/XMPP that scaled to 20k real CCU and performed load test validation for over 100k using horizontal pod scaling.
- Developed a game-specific real-time multiplayer lobby service in TypeScript/Node that scaled to 20k CCU using WebSockets and Redis Pub/Sub.
- Manage Kubernetes and AWS infrastructure with Terraform to enable a horizontally scalable and resilient micro-services architecture.
- Improve developer experience by making auto-generated API docs, establishing version/release protocols and configuring CI/CD pipelines with Buildkite/GitHub Actions.
- Setup service metrics and alerts using Prometheus and Grafana to monitor service stability and troubleshoot live-ops issues.

Senior Software Engineer @ Blizzard Entertainment

Irvine, CA | January 2016 – January 2020 (4 years)

- Developed and shipped a re-imagination of the *BlizzCon* website, which handled peak CCUs over 200k and featured live-stream integration and a highly time-sensitive, self-updating event calendar. This was one of the first mobile-first designs implemented on a Blizzard site and the first to be run on AWS/Node.
- Improved webpack development pipeline and built web UI components with Preact for *StarCraft: Remastered* game.
- Built a highly re-usable and themeable styleguide and component library that enabled faster development of *Overwatch*-related experiences while maintaining brand consistency.
- Introduced the team to React and Next.js to meet the demanding interactivity and performance requirements of the *Overwatch League* and *Overwatch Contenders* websites which featured live streams and data-driven resources such as players, teams, matches and stats as you might see on a sports league site like nhl.com.
- Integrated non-scalable data sources (data APIs, CMS) with our public-facing sites, building proxy APIs and utilizing caching layers to handle the large CCU spikes we would get during events and game announcements.
- Architected and implemented features of a React-based WYSIWYG website builder that blended the usability of a designer tool like Figma with the power of fully engineered components. This tool was used to launch several production websites, including *Warcraft III: Reforged* and *Diablo: Immortal*, cutting development costs significantly and empowering designers to execute on their own vision.

- Demonstrated the potential cost-efficiency of AWS Lambda/API Gateway by converting a low-traffic beta opt-in service from dedicated hosting, reducing running costs to ~\$0.02/day while maintaining speed and availability.

Web UI Developer @ Cineplex Digital Networks

London, ON | June 2014 – December 2015 (1.5 years)

- Developed features in a suite of Java micro-services that managed a scalable network of devices (tablets), enabling operational functions like remote content delivery, reboots, heartbeat monitoring, etc.
- Wrote automated system tests that would run through every step of the software lifecycle from spinning up databases with seed data to running Android VMs and interacting with services, increasing release confidence and driving down regression numbers.
- Designed and developed JavaScript web framework for Android browsers that allowed videos and images to be turned into an interactive tablet experience, allowing in-store customers to explore information about a shelf product.

Solutions Developer @ GoodLife Fitness

London, ON | January 2013 – June 2014 (1.5 years)

- Developed a digital, stream-lined 14-day Trial Membership sign-up which had a measurable increase in customer acquisition by lowering the barrier to getting into the fitness clubs for first-timers.
- Lead a sizable effort to redesign the club management system used by employees at over 300 locations. As well as refreshing the look and feel to be on-brand, it also allowed us to migrate away from VBScript which meant the clubs could upgrade their systems to modern browsers and fix the security vulnerabilities of running very old operating systems.

Software Developer (co-op) @ BlackBerry

Waterloo, ON | May 2012 – August 2012 (4 months)

- Developed a tablet-optimized web app for managing config settings for SlipStream's compression proxy client.
- Performed debugging and analysis in a C++ based socket library.

Software Developer (co-op) @ Info-Tech Research Group

London, ON | September 2011 – December 2011 (4 months)

- Developed features and fixed bugs on the core client-facing website built with Ruby on Rails.
- Learned about modern development methodologies and tools such as Agile Scrum, CI/CD and Git SCM.

Web Developer (co-op) @ Lawson Research Institute

London, ON | December 2010 – April 2011 (4 months)

- Developed a secure patient portal for capturing data in medical studies (JavaScript, PHP/CodeIgniter, MySQL).
- Met with stakeholders to gather requirements and provide progress updates on the project.

EDUCATION

Computer Programmer Analyst @ Fanshawe College

London, ON | September 2009 – December 2012 (3 years)

Ontario College Advanced Diploma
President's Honour Roll Recipient