
Seasoned full stack developer with nearly 20 years of experience building scalable online services, distributed systems, and AAA games. Skilled in cloud infrastructure, enterprise web applications, and developer desktop tools. Passionate about solving complex problems, optimizing workflows, and delivering reliable, high-quality features.

Technical Skills

- Programming languages: **Rust, Go, C#, C++, Python, PowerShell**
- Frontend frameworks/libraries: **React, Vue (TypeScript / JavaScript)**
- Cloud, containerization & infrastructure: **AWS, Docker, Kubernetes, Terraform**

Professional Experience

Principal Online Programmer

Sep 2024 – Present

Invoke Studios (subsidiary of Wizards of the Coast), Montreal, QC

Designing and implementing the online tech stack and AWS infrastructure for an unannounced title.

- Research, analyze, and evaluate SaaS backend solutions to identify the best fit for the project's needs.
- Advocate and implement Infrastructure as Code (IaC) practices to improve reproducibility, consistency, and scalability of deployments.
- Develop and maintain monitoring and analytics solutions using Loki and Grafana, crafting dashboards that empower the User Research team to make data-driven decisions.

Senior Online Programmer

Nov 2021 – Aug 2024

Haven Interactive Studios (member of PlayStation Studios), Montreal, QC

Early core member of the online team, building *Fairgames*' backend tech stack from the ground up.

- Designed and developed libraries and online services (Go / Rust), including matchmaking, game server orchestration and session allocation, game data configuration etc.
- Created back-office web tools with React (TypeScript) for managing game servers and administering online services.
- Mentored an undergraduate intern as the primary technical guide, collaborating to integrate a game server orchestration solution within a tight timeline.

Senior Online Programmer

May 2017 – Oct 2021

Ubisoft Montreal, Montreal, QC

Key contributor of the online team supporting *Rainbow Six Siege*, with a focus on game server orchestration and live operations.

- Owned and optimized processes for deploying and managing game server builds across multiple cloud platforms (Azure PlayFab, Amazon GameLift etc.), ensuring high availability and operational resilience.
- Developed online services in Go, Python, and C# to support live game production and operations.
- Built internal web applications using Vue.js and Polymer to meet live operation and quality control testing needs.
- Provided on-call support, diagnosed and resolved production incidents to minimize downtime and maintain service reliability.

Senior Programmer (Promoted in Apr 2016)
Ubisoft Singapore, Singapore

Jan 2014 – Apr 2017

- Built and maintained online services and back-office tools (.NET/C# and JavaScript) to support live game operations.
- Integrated and expanded payment platforms with Ubisoft HQ, enabling hard currency purchases and subscriptions to boost monetization.
- Collaborated with overseas studios to share, adapt, and extend tools across multiple projects.
- Enhanced backend systems for customer support, SKU management, and player activity logging.
- Assisted with Perforce administration, including branching and integrations.

Build Engineer / Platform Programmer
Ubisoft Singapore, Singapore

Aug 2011 – Jun 2013

- Managed automated build and deployment pipelines for game production, ensuring reliable and repeatable releases.
- Developed and optimized tools to configure and deploy online services and game patches efficiently.
- Integrated online service parameters with build and deployment processes to streamline production workflows.
- Documented backend platform dependencies and workflows to improve team knowledge sharing.
- Administered Perforce source control and maintained build machines.
- Set up and configured game engine and toolsets for onboarding new developers.

--- *Early career experience outside the video game industry* ---

Senior Application Consultant
NCS Pte. Ltd., Singapore

Oct 2009 – Aug 2011

- Enhanced and maintained ASP.NET (C#/VB/WCF and MS SQL) systems supporting operations across multiple healthcare facilities.
- Troubleshoot production issues, ensuring timely resolution per service-level agreements.
- Gathered requirements, performed impact analysis, and implemented change requests to improve system functionality.

Software Engineer
I-Access Solutions Pte. Ltd., Singapore

Apr 2007 – Oct 2009

- Developed ASP.NET (VB and MS SQL) web applications for educational institutions, supporting ERP, CRM, and daily operations.
- Served as technical lead, coordinating with project managers on resource planning, scheduling, and estimates.
- Conducted knowledge-sharing sessions and mentored new hires to accelerate team ramp-up.
- Collaborated with clients throughout testing (UAT, SIT) and product release phases.

Languages & Education

English (Fluent), Mandarin (Native), Malay (Advanced), French (Intermediate)

Bachelor of Computer Engineering
Nanyang Technological University, Singapore

2002 – 2006

Specialist Diploma in Games Development (Postgraduate, Part-Time)
Nanyang Polytechnic, Singapore

2010 – 2011