

Patricio (Pato) PERPETUA

Senior Software Engineer | Technical Lead | .NET, React & Azure | Cloud & Platform Modernisation | Australian Citizen – NV1 Eligible

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SUMMARY

Senior Software Engineer and technical lead with 13+ years of experience delivering secure, scalable and maintainable cloud, web, mobile and backend systems across SaaS, accounting, government, automotive, healthcare, agriculture and professional services. Own complex work from discovery and system design through implementation, testing, deployment, production support and continuous improvement.

Experienced in modernising long-lived platforms, designing multitenant architectures, building and integrating APIs, improving cloud infrastructure, and establishing automated CI/CD pipelines across Azure and AWS. Apply pragmatic architecture, DevOps practices and cost-aware engineering to improve reliability, delivery speed and operational efficiency while managing technical risk.

Trusted to work closely with product managers, technical leads, engineering managers, business analysts, designers, QA specialists, subject-matter experts and government stakeholders. Translate business and compliance requirements into practical technical solutions, communicate trade-offs clearly, organise delivery backlogs and take ownership of critical incidents through to resolution.

Hands-on across C#, .NET, TypeScript, React, SQL Server, distributed systems, Docker and cloud platforms. Lead and mentor engineers through pair programming, design guidance and code review, while remaining accountable for production outcomes. Well suited to Software Engineer, Staff Engineer, Platform Engineer, Cloud Engineer and Technical Lead contract engagements involving complex, high-trust systems. Australian citizen eligible to obtain Australian Government security clearances, including NV1.

▣ WORK EXPERIENCE (8)

Senior Software Engineer - Full-Time at Karbon

Aug 2025 - Current

Work as a Senior Software Engineer in a core product team delivering Karbon's SaaS accounting practice management platform. Collaborate closely with the Tech Lead, Engineering Manager, and Product Manager to design and deliver product features. Contribute to backlog planning and prioritisation, mentor junior engineers, and support broader company initiatives through data insights, SQL scripts, and workflow automation.

- ★ Tech stack: C#, .NET 8, ASP.NET Core, SQL Server, NHibernate, MassTransit, Azure, Docker, Redis, Elasticsearch, NUnit, IdentityServer, CQRS, DDD, TypeScript, React, Next.js, Ember.js, Tailwind CSS, shadcn/ui, TanStack Query, React Native, Expo, Storybook, Vitest, Playwright, Cloudflare Workers, pnpm, Turborepo.
- ★ Collaborate with engineering and product leadership to shape features, refine requirements, and organise the team backlog.
- ★ Design and deliver product features as part of a core cross-functional team.
- ★ Mentor junior engineers and support their technical development.
- ★ Provide company insights and operational support through SQL scripts and automation.

Sr. Full-Stack Engineer - Fulltime (React - .NET - Sitecore - Mobile) at LEXUS Australia (IE Media)

Jan 2022 - Mar 2025

Worked as a Senior Full-Stack Engineer in the Lexus BAU team. Initially joined as a Frontend Engineer and progressively expanded my skill set to include Sitecore, C# and Xamarin, allowing me to contribute across content management systems and cross-platform mobile development.

Collaborated daily with Business Analysts, Designers, and Engineers on a variety of projects involving PR reviews, full-stack development, Sitecore implementation, estimations, and design validation. The core team consisted of 3–5 engineers, 2 designers, 2 BAs, a QA, a Project Manager, and 4 content creators, scaling up to 20+ members

depending on project scope. My role was both hands-on and collaborative, focused on delivering scalable solutions that meet Lexus' high standards for digital experience.

- ★ Tech stack: React, C#, .NET, Sitecore 9 & 10, Xamarin, Android, iOS, SPA, Storybook, Next.js, Azure, Azure DevOps, Azure Pipelines, JIRA, Spring Apps.
- ★ Maintained and enhanced 28 CMS-managed websites using Sitecore, React, and .NET.
- ★ Developed and supported React Single Page Applications for web experiences.
- ★ Led the migration from Xamarin to an Ionic + Capacitor solution, unifying the codebase for Android, iOS, and web platforms.
- ★ Upgraded legacy systems: .NET microservices (v3.5 → v5), Sitecore 9 → Headless Sitecore 10 with Next.js & GraphQL, React 15 → 18, Redux 2 → 5.
- ★ Defined a design-to-dev workflow with designers, integrating Figma tokens, UI libraries, and Storybook to improve consistency and velocity.
- ★ Facilitated incident response for critical Sitecore, Boomi, Salesforce, and Azure issues, ensuring fast and coordinated triage across teams.

Sr. Full-Stack Engineer - Contract (React - .Net) at RPS Group (Australia) Dec 2020 - Dec 2021

Contracted as a Senior Full-Stack Engineer to build a project management platform for government agencies. Initially brought on for one month, my role was extended to nine months due to performance and leadership contributions. I led a team of five engineers, owning feature prioritization and delivery while liaising with subject matter experts (SMEs) to design and implement full-stack solutions.

- ★ Tech stack: .NET, .NET Core, JavaScript, TypeScript, React, Ant Design, Azure, Azure DevOps, SQL Server, Azure Blob Storage, Azure App Services, Azure Pipelines.
- ★ Established end-to-end DevOps automation using Azure DevOps and Pipelines, improving deployment reliability and speed.
- ★ Optimized Azure infrastructure by restructuring resource groups and eliminating redundant services—significantly reducing cloud costs.
- ★ Designed and implemented a multitenant architecture to support multiple clients on a shared infrastructure, enabling scalable, cost-effective SaaS delivery.
- ★ Took full ownership of a legacy project being rebuilt, delivering new features and stabilizing the codebase independently—completing the work in under two weeks despite a one-month allocation.
- ★ Initiated and led pair programming sessions with colleagues, mentoring other engineers and accelerating team delivery.
- ★ Collaborated directly with multiple SMEs, stakeholders, and project managers, ensuring technical solutions aligned with business requirements and government compliance.
- ★ Actively participated in technical and functional analysis sessions with government agencies to define key product features and constraints.

Sr. Mobile & Full-Stack Engineer - Contract (Kotlin, Java, React) at Robert Half (Australia)

Sep 2020 - Apr 2021

Worked independently as a Mobile/Full-Stack Engineer, reporting directly to the CTO at a company providing concierge and content display systems for hospitals and hospitality venues. Managed and coordinated two offshore development teams (Philippines and Argentina), delivering cross-platform solutions across web, Android, and backend services.

- ★ Tech stack: JavaScript, TypeScript, React, Bootstrap, Node.js, Android, Kotlin, Java, Spring Boot, MySQL, AWS (S3, Lambda, Route 53), Microsoft Graph API
- ★ Improved native Android app performance, reducing RAM usage from 350MB to 110MB and enhancing stability on low-end devices.
- ★ Integrated third-party services including Canva and Unsplash into the web platform, expanding content creation capabilities.
- ★ Modernized a 10-year-old Spring + jQuery project by designing and implementing React integration without disrupting core features.
- ★ Led the migration strategy from jQuery to React, introducing a phased plan for gradual adoption.

- ★ Designed a scalable UI architecture using reusable components, reducing development time by 30% and ensuring visual consistency.
- ★ Refactored and stabilized two full-stack Java Spring applications using jQuery and Amazon S3, resolving critical bugs.
- ★ Built a Spring Boot API and React frontend to modernize internal tools.
- ★ Developed a Node.js API and React app that interfaced with Microsoft Graph API to display real-time meeting data on Smart TVs.

Sr. Full-Stack Engineer - Contract (React - .Net) at Sola IO (Australia) Dec 2019 - Mar 2020

Joined Sola.io as a Engineer Consultant to assess and modernize their technology stack. Successfully reduced the IT budget by 60% by replacing paid tools with open-source solutions, streamlining operations through automation, and integrating key platforms via custom APIs.

- ★ Tech stack: JavaScript, TypeScript, Node.js, React, Docker, AWS, ZOHO
- ★ Developed custom APIs to integrate with platforms like SOHO, significantly reducing manual processing time.
- ★ Replaced costly third-party tools with in-house NodeJS APIs, lowering operational costs.
- ★ Optimized WordPress sites for speed and SEO, improving site visibility and performance metrics.
- ★ Automated internal workflows, eliminating repetitive tasks and boosting team efficiency.

Sr. Backend Engineer - Contract (NodeJS) at Farmbot (Australia) Dec 2019 - Dec 2019

Farmbot develops and sells weather monitoring devices for agricultural use. Brought in to integrate systems from two separate companies by implementing a secure data-sharing mechanism. Designed and deployed an OAuth-based authentication system using AWS Cognito, including full requirements gathering, documentation, and the development of two production APIs.

- ★ Tech stack: JavaScript, TypeScript, Node.js, NestJS, Docker, AWS (Lambda, Cognito), Prisma, Swagger.
- ★ Designed and implemented OAuth 2.0-based API authentication using AWS Cognito to securely share data between two applications.
- ★ Assessed data structures of both platforms to define what, how, and when information should be shared—ensuring security and compliance.
- ★ Worked directly with the CTO and company managers to align integration strategy with business and technical goals.
- ★ Created two RESTful APIs to support cross-platform data access, enabling seamless communication between legacy and new systems.
- ★ Produced technical documentation and conducted internal walkthroughs to ensure maintainability and handover readiness.
- ★ Applied OpenAPI specifications to define the APIs and automatically generate client libraries for consumers, reducing integration time and improving developer experience.

Sole Full-Stack & Cloud Engineer at RavimoShark (France) Jun 2017 - Nov 2019

Served as the Sole Full-Stack & Cloud Engineer at a company that rents and sells dishwashers to restaurants. Initially joined as an intern to develop an Android app, but quickly assumed full ownership of the system architecture. Led the redesign of backend services, built cloud-native integrations with on-premises systems, and modernized the entire tech ecosystem. Transitioned to remote work after six months, first from Argentina and later from Australia, continuing to drive technical strategy and execution independently.

- ★ Tech stack: Kotlin, Java, Spring Boot, Hibernate, NestJS, Node.js, Android, Angular, React, TypeScript, Azure (App Services, AAD, Blob Storage), Docker, MSSQL, Swagger, OpenAPI, GitLab CI, Azure Pipelines.
- ★ Redesigned the data architecture and refactored existing Node.js APIs to support scalability, security, and modern integration patterns.
- ★ Built automation scripts to migrate and synchronize data between legacy and new systems, reducing manual work and risk of data loss.
- ★ Integrated Azure Cloud with on-premises infrastructure to pull real-time data from the company's ERP (SAGE).
- ★ Developed a native Android app (Java, later Kotlin) to support field operations; published and maintained it across updates.
- ★ Maintained a legacy Angular app while building a modern replacement using React.

- ★ Implemented single sign-on (SSO) using Azure Active Directory to unify access control across platforms.
- ★ Created a RESTful API in NestJS and used OpenAPI definitions to generate client libraries for frontend teams.
- ★ Configured CI/CD pipelines using GitLab and Azure Pipelines to streamline deployment and release processes.
- ★ Worked closely with the General Manager, SMEs, and app users to translate business requirements into robust technical solutions.

Full-Stack Developer at Singleton Software Development (Freelance Argentina)

Jan 2013 - Oct 2019

Provided software development and consulting services across mobile, web, backend, cloud, and database systems for a portfolio of long-term clients. Projects included everything from initial scoping and proposals to full-cycle development and post-launch maintenance. Most clients were acquired through direct outreach and are still in contact with me for ongoing support, reflecting the quality and trust built over time. All work involved iterative delivery within time and budget constraints.

- ★ TLC (2018–2019) – Package Delivery Company: Delivered a full-stack logistics platform including API services, frontend web app, and database. Continue to maintain their servers and enhance functionality. Stack: Node.js, Angular, Docker, MySQL, AWS, Swagger.
- ★ Intelydrone (2018–2019) – Livestock Tracking Startup: Built and deployed backend architecture to support drone-based livestock tracking. Stack: Node.js, MongoDB, Docker.
- ★ DilMedica (2016–2018) – Medical Prosthesis Supplier: Developed a Java desktop app to manage invoicing, payslips, and budgeting. Stack: Java, Java EE, Hibernate, SQLite, JasperReports.
- ★ Fiscalizar (2015–2019) – Personal Civic Project: Built Android, web, and backend apps to help track vote counts in Argentine elections. Stack: Angular, Node.js, Android, MySQL, Docker, AWS Lambda, AWS S3.
- ★ Torneo InterCollege (2015–2016) – Amateur Soccer League: Created an Android app for player stats and a Java desktop system for managing tournament data. Stack: Java, Android, Java EE, MySQL, AWS S3.
- ★ Real Estate Property Management (2014–2017): Developed a platform to manage rent, maintenance, bills, and payments for a mid-sized real estate agency. Stack: PHP (Laravel), jQuery, Bootstrap, MySQL.
- ★ Libraries & Drugstores (2013–2016): Built POS and inventory tracking systems used by 15+ small-to-medium retail businesses. Stack: Java, Java EE, Hibernate, SQLite, JasperReports.

SKILLS

Strengths Leadership Experience End-to-End Development Initiative & ownership Problem-solving Strategic thinking Innovation & initiative Lean/agile delivery	Remote Working Cross-Team Communication Self-Motivation & Drive Time Zone Coordination Cultural Awareness Stakeholder Alignment Empathy & Listening Independent Judgement	Advisory Trusted Tech Advisor Tech Due Diligence Support MVP Planning & Execution Scalability Planning Cost-Aware Engineering Investor Communication Solution Evangelism
Languages C# (+5 years) Java/Kotlin (+5 years) JavaScript (+5 years) Typescript (+5 years)	Web HTML, CCS, JS (+5 years) Angular (+5 years) React (+5 years) NextJS (+3 years)	Javascript Frameworks Angular (+5 years) React (+5 years) NextJS (+3 years) NestJS (+5 year)
Cloud	Mobile	CMS / Platforms

AWS (+3 years) Azure (+5 years) GCP (+2 years)	Android Java/Kotlin (+5 years) Capacitor (2 years) Xamarin (+3 years)	Sitecore (+3 years) Wordpress (2 years) Salesforce (+3 years) Boomi (2 years)
Database SQLite (+5 years) SQL Server(+5 years) MySQL (+5 years) MongoDB (1 year)	CI/CD Tools Gitlab CI/CD (+5 years) Docker (+5 years) Azure Pipelines (+5 years) Bitbucket (+3 years)	Scripting Bash (+5 years) Powershell (+3 years) Kotlin (2 years) Python (2 years)

▣ EDUCATION (3)

College Bachelor in Computer Science at Universidad Nacional de Cordoba, Argentina

Jan 2012 - Dec 2018

Major courses:

Algorithms and Data Structures

Operating Systems

Databases

Software Engineering

Computer Networks

Web Development

Mobile Application Development

Formal Languages and Automata

Systems Programming

Discrete Mathematics

Probability and Statistics

Project Management

Grade: 7.5/10

College Master of Science in Informatics at Ensimag Grenoble INP, France

Jan 2017 - Dec 2017

Major courses:

Software Analysis, Design and Validation

Construction of Web Applications

Object-Relational Database Systems

3D Computer Graphics

Human-Computer Interaction

Introduction to Distributed Systems

Grade: 13.7/20

High School Technician Specialisation Electronics at ITS Villada, Argentina

Jan 2006 - Dec 2011

Major courses:

Java Programming

C and C++ Programming

Digital and Analog Electronics

Microcontroller Programming (PIC and Arduino)

Electrical Systems and Circuit Design

Home Automation (Domotics)

Technical Drawing and PCB Design

Control Systems

Telecommunications

Industrial Safety and Maintenance

Grade: 8.5/10

▣ LANGUAGES (4)

English

Fluent

Spanish

Native

French

Intermediate

Italian

Intermediate