

Norman van der Ploeg

Senior Software Engineer — Mobile & Full-Stack

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SUMMARY

Senior software engineer with 14 years building and shipping production mobile, backend and web systems. For the past two years I have run Nanzero Interactive, sole engineer on **Skadi's Edge**, an archery performance platform with 75 archers across four teams with the app installed — Flutter clients live on Google Play and in TestFlight beta on iOS, a **Go** API on **Firestore/Firebase**, and **Svelte** dashboards, deployed and operated end to end. Previously iOS team lead on a flagship app with millions of downloads, where I led four developers, drove the Objective-C to Swift migration and raised test coverage from 6% to 35%.

EXPERIENCE

Senior Software Engineer & Founder — Nanzero Interactive

Jun 2024 – Present

- Sole engineer on **Skadi's Edge**, an archery performance platform with **75 archers across four teams** with the app installed (36 Android, 39 iOS TestFlight) — owning product design, architecture, implementation, release and production operations. **Android is live on Google Play; iOS is in TestFlight beta.**
- Built the **Flutter/Dart** client athletes use to log training sessions at the shooting line and review performance feedback, shipped through the Play Console and TestFlight release pipelines — [installable on Google Play](#).
- Designed and implemented the **Go** REST API over **Firestore**, with **Firebase Auth** token-based authentication and one typed data model shared by the mobile client and the web dashboards, with cloud sync across an athlete's devices.
- Built **Svelte/SvelteKit** coach dashboards giving squad-wide visibility over the same data athletes record on their phones.
- Integrated **Stripe** across both products — subscription billing on the coach platform, **Stripe Connect** for tournament entry fees paying organisers out directly, and **webhook**-driven handling of subscription lifecycle and payment reconciliation — handlers are **idempotent** by design, built for Stripe's at-least-once delivery guarantee. In-app tiers use **Play Billing** and **StoreKit**.
- Run the whole deployment path myself: each service in its own **Docker** container behind an **NGINX** reverse proxy, on a **Linux** VPS with no public ports but the proxy and SSH restricted to key-only auth.
- **GitHub Actions** builds and runs the test suites on every push across both products, producing the release images. Skadi Events deploys continuously to staging and production, pulled onto the host by **Watchtower**, and its Stripe payment path is exercised before release against a simulated Stripe locally and Stripe test mode on staging.
- Built and soft-launched **Skadi Events** (2026), a tournament registration, scoring and results platform on its own **PostgreSQL** schema, sharing Skadi's Edge identities through Firebase Auth so one account works across both products.
- Delivered Archery Canada's national records list as a **React + TypeScript** application packaged as a **WordPress** plugin (**PHP**), replacing a document-driven process with a filterable list that association staff maintain from their existing CMS.
- Work day to day in an AI-accelerated development workflow — agentic coding for boilerplate and large architectural refactors, applied to production code.

Senior Software Developer, Full-Stack — phenoML

Aug 2023 – Apr 2024

- Developed **Go** backend services for data collection from client applications.
- Set up **Cloud Run** and **BigQuery** on **GCP** to support the data processing pipeline.
- Built cross-platform **Flutter** client applications, including multiple mini-games.
- Worked on systems supporting and monitoring mental health indicators.
- Used Git and **CI/CD (Cloud Build, GitHub Actions)** in a collaborative team environment.

Senior Software Developer / iOS Team Lead — Avenza Systems

Sep 2019 – Jul 2023

- Technical lead on **Avenza Maps**, the company's flagship **iOS** app — millions of downloads on the **App Store**.
- Led a team of four iOS developers, ran code review and defined the coding standards.
- Migrated the codebase from **Objective-C** to **Swift**, with selective **SwiftUI** adoption alongside the existing **UIKit** app.
- Spearheaded the initiative that raised test coverage from **6% to 35%**, substantially reducing regressions release over release.
- Worked in the **C++** core with industry-standard GIS and geospatial PDF libraries; cut offline map processing time by up to 70% through targeted optimisation.
- Automated builds with Bitbucket and **Jenkins** hooks in the team's **CI/CD** pipeline.

Senior Software Developer, Backend — CloudStreet Gaming

Jan 2019 – Jul 2019

- Built backend services in **C#** with **Python** tooling.
- Implemented auditable, idempotent game logic over a relational (**SQL**) database for a networked poker platform, where every hand had to be replayable and reconcilable.
- Worked within casino gaming regulatory requirements.

SDK Developer — FusePowered / Upsight

May 2014 – Dec 2018

- Developed mobile analytics and advertising SDKs for **iOS**, **Android** and **Unity**, shipped to third-party app developers.
- Worked on SDK internals and public APIs in **Objective-C**, **Java** and **C#**.
- Integrated multiple third-party ad network SDKs.

Game Programmer, Mobile — Blammo Games

Aug 2012 – May 2014

- Developed mobile games on a **C++**-based engine.
- Supported **iOS** and **Android** platforms.

TECHNICAL SKILLS

Languages: Swift, Objective-C, Go, Dart, TypeScript, C++, C#, Java, Python, PHP

Mobile: iOS, Android, Flutter, SwiftUI, UIKit, App Store / Google Play release, TestFlight, SDK development

Backend & cloud: Go REST APIs, Firebase, Firestore, PostgreSQL, SQL and relational schema design, GCP (Cloud Run, BigQuery), Docker, NGINX, Linux/VPS, authentication & authorisation, Stripe (subscriptions, Connect, webhooks)

Web: Svelte, SvelteKit, React, TypeScript, Tailwind CSS, WordPress

Practice: Technical leadership, code review, coding standards, test coverage, CI/CD (GitHub Actions, Cloud Build, Jenkins, TeamCity), Terraform (OpenTofu), Git, Agile delivery

AI-accelerated development: Agentic coding workflows, Model Context Protocol (MCP)

Specialised domains: Geospatial / GIS systems, PDF processing, mobile SDKs