Reinder Kas

Software Engineer

Contact

www.reinder.dev
contact@reinder.dev
0400 927 645
github.com/ReinderKas
linkedin.com/in/ReinderKas
Onslow, WA

Visa

417 Working Holiday until 15 Jan 2027

Migration agent ready to handle paperwork

Eligible for employer sponsorship:
- (482) Skills in Demand
- (494) Regional

Open to relocation

Education

2016 - 2023

BSc - Artificial Intelligence
Rijksuniversiteit Groningen

Tech Skills

Languages

C# · Python · TypeScript · SQL

Frameworks

.NET · React · Angular · Tailwind · Material UI · React Native

Cloud & DevOps

Azure · Google Cloud · Docker · GitHub Actions · CI/CD

Databases

PostgreSQL · MSSQL · Supabase

AI & Automation

OpenAI · LangChain · Hugging Face · Stable Diffusion · N8N · Make

Software engineer with 9+ years building SaaS products from the ground up.
At Elfsquad I joined at the early startup stage and designed the Product Configuration Solver, the core algorithm the company still runs on. I've worked across the full stack (C#/.NET, Angular, Azure, Docker, CI/CD), cofounded an AI-powered product advisor, and built AI and automation solutions with N8N, Make and generative AI. I hold a Bachelor of Science in Artificial Intelligence.

Based in Onslow, WA. Working with a **migration agent** and seeking a sponsored long-term role; open to relocating anywhere.

Software Engineering Experience

AI Specialist - Fotocadeau Group, Netherlands - May 2025 - Nov 2025

- Analysed business processes and built automations with Make and N8N, saving ~80 hours/week of manual work within 3 months of starting.
- Built a generative AI feature that restyles customer photos in any art style before printing on canvas.
- Tech: Google Cloud, Make, N8N, OpenAI and Stable Diffusion APIs, Python, Hugging Face, LangChain.

Technical Cofounder - Bluebarry, Netherlands - Aug 2024 - Feb 2025

- Started alongside my full-time role at Elfsquad (with their knowledge).
- Cofounded an AI-powered product advisor that helps online shoppers find the right product through a guided, conversational experience. The company continues to operate today.
- Designed the technical architecture and built the platform with .NET (C#), Angular, PostgreSQL and Azure.
- Contributed to marketing alongside development, including branding, website content, UI/UX design, and business strategy.
- Worked across product, technical and business decisions as part of a 4-person founding team.

AI Software Engineer - Elfsquad, Netherlands - Aug 2016 - Nov 2024

Joined as one of the first developers at an early-stage startup and stayed through its growth into a scale-up (part-time while studying until 2023).

- Designed and built the Product Configuration Solver, the core algorithm that still powers Elfsquad's platform today.
- Continuously optimised the solver through many iterations of profiling, benchmarking and refinement, cutting solve times from several minutes to ~50 ms (over 1,000x faster) on configuration models of 250,000 nodes and 500,000 constraints.
- Powered tens of thousands of quotes per month for 200+ manufacturers, with individual quotes often exceeding €1 million.
- Built Feature Model Diagnostics (my bachelor's thesis), pinpointing conflicting constraints and suggesting fixes for unsolvable customer models.
- Developed full-stack features using .NET (C#), Angular, MSSQL and Azure, covering front end, back end, databases, hosting, user management and third-party integrations.
- Provided technical customer support when needed, fixing issues directly across any part of the application.

Other Experience

ICT Support Officer - Onslow School, Western Australia - Jul 2026 - now

- Manage IT for a school of ~200 users, covering networking, infrastructure, and end-user support.
- Built a PowerShell-based toner monitoring dashboard (HTML / CSS) that shows the toner levels of all school printers on a single page, and automatically emails the Manager Corporate Services to reorder when levels run low.

Core Strengths

- Constraint solving & optimisation
- Performance engineering
- Full-stack development
- AI & LLM integration
- Process automation
- System architecture
- Customer-facing problem solving

Languages

- English (Fluent)
- Dutch (Native)
- German (Moderate)

Additional

- Driver's licence
- Motorcycle licence
- Working with Children Check (WA)
- Member of the Onslow Sports Club

Projects

SelfKeep - Personal App suite

www.selfkeep.app

Tech: React Native, Tailwind, Expo, Supabase, Google Cloud.

A suite of integrated apps built around a central habit tracker. Every app automatically logs its goals and points to it, so a workout, tennis match or budget goal shows up across the whole suite.

- **Leagued**: an Elo-based ranking league for friends, currently used by the Onslow Tennis Club.
- **Habits**: a habit tracker for insights into daily routines.
- **Workout Logger:** tracks workout progress over time.
- **Finance Tracker**: tracks income and spending, with budgets and goals.

Feature Model Diagnostics

github.com/ReinderKas/BachelorProject

Tech: .NET, C#, Angular, Azure, MSSQL

Bachelor's thesis, applied in production at Elfsquad

Customers building product models in Elfsquad often created feature models with no valid configuration, and had no way of knowing why. My thesis researched how to diagnose these broken models, and I built the solution into the platform.

- Pinpointed the exact conflicting constraints that made a model unsolvable (minimal conflict sets).
- Proposed concrete fixes showing customers what to change to restore a valid configuration (diagnoses).
- Let customers repair broken models themselves and reduced support requests.

Expression Parser

github.com/ReinderKas/Expression-Parser

Tech: .NET, C#

Built a custom expression parser to reverse-engineer a third-party "black box" used at Elfsquad. It parses formula strings into executable expression trees using a self-designed Backus-Naur Form (BNF) grammar, extended with Elfsquad's variables for domain knowledge.

- Used static analysis of the parsed expressions to perform domain reduction, working out in advance which values each variable could and couldn't take.
- Fed these reduced domains into the Product Configuration Solver as a constraint-propagation step, pruning the search space and speeding up solving.

References

Contact details available on request.

Anco Postma
Tech Lead - Elfsquad (also Cofounder Bluebarry)

Eelke Kramer
(Former) Operations Director - Elfsquad

Pascal Vellema
IT, AI & Production Manager - Fotocadeau Group

Taylah Williams
Manager Corporate Services - Onslow School