



NUNO GRILO

SENIOR SOFTWARE DEVELOPER · IOS & MACOS · AI ENGINEERING

Location: Fão, Portugal **Email:** hi@nunogriolo.com **Phone:** +351 934 568 268

Web: nunogriolo.com **GitHub:** github.com/nfgriolo **LinkedIn:** linkedin.com/in/nfgriolo

Nationality: Portuguese **Driving licence:** B

PROFILE

Passionate Senior Software Developer with **25+ years in software, 15+ in the Apple ecosystem** (iOS & macOS: Objective-C, Swift, SwiftUI), and **AI engineering** — building **LLM-powered applications**. I also build **full-stack, edge-first products** with Cloudflare Workers, Next.js and TypeScript, on top of a deep background in Java & web backends, frontends and systems.

Self-taught since exploring BASIC on a ZX Spectrum 48K at age 8, I graduated in Computer Science in 2001 and have since worked across software, telecommunications, electronics, higher education and healthcare — adapting quickly to new technologies, contexts and cultures. I have an entrepreneurial streak (co-founded two companies) and years of experience in distributed, remote teams (Sakai community, Paw). I always put my love in what I do — positive, open-minded and determined, and always looking for greater and bigger challenges.

CORE SKILLS

AI & LLM Applications — Production LLM apps — RAG & semantic search, multi-provider model fallback, tool use, structured output, speaker diarisation, long-document analysis, per-call cost telemetry.

iOS & macOS Development — 15+ years; Objective-C, Swift, SwiftUI, Swift Concurrency, SwiftData, Swift Testing, WidgetKit, App Intents, StoreKit 2, Swift Charts, watchOS, UIKit/AppKit, CoreData, MapKit, XPC.

Security & Encryption — At-rest encryption of entire data stores, Keychain key hierarchies, Face ID/Touch ID with enrolment-state invalidation, code-signing, DSA licensing, GDPR PII redaction.

Backends & APIs — Node.js, Python, Hono; RESTful & GraphQL APIs; data modelling and authentication.

Frontend Web — React, Next.js, TypeScript, Tailwind CSS, on solid HTML, CSS and JavaScript foundations.

Java Desktop — AWT, Swing, SWT, Eclipse RCP.

AI-Assisted Development & Automation — Agentic coding tools and AI-driven automation pipelines to build faster and automate workflows end to end.

Systems & Reverse Engineering — Reverse-engineering undocumented binary formats, mach code injection, SMJobBless privileged helpers, XPC/IPC, raw-socket networking, sandboxed JavaScriptCore runtimes.

Edge & Full-Stack Web — Cloudflare Workers, Hono, D1, R2, Queues, Containers; modern Next.js — fast, serverless, globally distributed.

DevOps & Infrastructure — Docker, CI/CD, serverless/Cloudflare infrastructure; automated builds, deployments and monitoring.

Backends (earlier) — LAMP (Apache, Nginx, PHP, Perl, MySQL, PostgreSQL); Java (Spring, Hibernate, Apache Wicket, JSF, SOAP, Ant, Maven).

Systems & Databases — Windows & Linux networks, Active Directory; MSSQL, MySQL, PostgreSQL, SQLite.

Languages & tooling — Swift, Objective-C, C, C#,
Java, Python, TypeScript/JavaScript, SQL; Git,
GitHub, Slack.

WORK EXPERIENCE



Senior macOS/iOS/watchOS Developer — Indie Developer / Freelancer

May 2017 – Present

Remote

Working on own products and as a freelancer across iOS/macOS, full-stack and AI projects.

- Design, development and launch of **Epic — Surf Report & Forecast** — a solo-built SwiftUI surf-forecast app for iPhone, Apple Watch and widgets, **featured in Apple's "Surf's Up" collection**. Cost-aware forecast pipeline over metered marine-data APIs (StormGlass, WorldTides) with Core Data caching, background ideal-conditions alerts, StoreKit 2 subscriptions and 8-language localisation; full product ownership (design, engineering, App Store/ASO, paywall, analytics).
- Building **PatternVault** — a native macOS app for systematic traders on the modern Apple stack: document-based SwiftUI with SwiftData, Swift Charts analytics and Swift Testing.
- Full-stack and edge web work with Cloudflare Workers, Hono, D1/R2 and Next.js; AI/LLM features.



AI Engineer / Technical Partner — SCIT Consulting

Feb 2025 – May 2026

scitconsulting.eu · Europe (remote)

SCIT Consulting is a boutique AI consultancy helping companies across Europe transform with artificial intelligence — AI-native solutions built with Claude, GPT and Gemini. In partnership with SCIT, designed and built **Juris by AI**, an AI-powered legal-transcription platform.

- Design and development of AI projects — LLM-powered applications, custom AI agents, AI automation and conversational AI.
- Hands-on AI engineering and technical advisory, from strategy to execution.
- **Juris by AI** (jurisby.com) — AI legal transcription with speaker identification, AI summaries, contradiction detection, semantic search and GDPR-compliant redaction; 99-language support.
- Juris by AI tech stack — LLM transcription/summarisation pipelines, audio/transcript sync, multi-format export (DOCX/PDF/TXT/JSON), EU-based encrypted S3 storage, Stripe billing.



Senior iOS Developer — Sherpany

Sep 2018 – Jul 2021

sherpany.com · 100% remote

Sherpany is a meeting-management platform for boards, executive teams and committees in regulated industries — covering the full meeting lifecycle across iPhone, iPad, web and Windows.

- Development of the Sherpany iOS application (iPhone and iPad) — secure document distribution with offline access, synchronised meeting flow, digital voting and resolutions.
- Multi-disciplinary, cross-functional team (product, design, backend, QA) in a fully agile environment.
- Introduced and maintained **Fastlane** for iOS CI/CD — automated builds, code signing, screenshots and TestFlight / App Store distribution.
- Fully remote position.



Senior macOS Developer — Paw SAS

Oct 2015 – Apr 2017

paw.cloud · 100% remote · Software Development

Paw builds beautifully designed apps that make interaction with REST services delightful.

- Development of the **Paw** app — a full-featured macOS HTTP client for API testing, documentation and team work.
- Collaboration on the Paw Documentation site; user support.
- Stack: Swift, Objective-C, C, Cocoa, Foundation, CoreData, JavaScriptCore, AFNetworking, PromiseKit, ThemeKit.
- Collaborative environment using Slack and GitHub.
- Paw was later acquired by **RapidAPI**, and more recently by **Nokia**.



CTO, Co-Founder, Senior Software Developer — Interacto Labs Inc.

Jan 2008 – Jul 2016

flavours.interacto.net · Software Development

Software company building products for Mac with great user experience.

- Development of **Flavours 2** and **Flavours Classic** — Mac theming apps (local + online theme store, Photoshop-like editor, background agents, helper tools, dynamic code injection for runtime theming).
- OS X reverse-engineering of system drawing procedures; application model, logic, presentation and supporting tools/agents/libraries.
- Server-side application with RESTful API backing the online Flavours Store (PHP, MySQL); in-house tooling (PHP, Objective-C).
- Company incorporation, IT/dev workflow, strategic direction; server setup and administration (FreeBSD); user support.



IT Director, Software Developer — Santa Casa da Misericórdia de Fão

Nov 2010 – Feb 2012

Fão, Portugal · Healthcare & social work

Healthcare group with hospital, day nursery, elderly day-care and retirement-home facilities.

- Responsible for all company IT assets; full replacement of the legacy hospital management system, incl. migration planning and data migration.
- Server virtualization (Hyper-V); network design and administration (Active Directory); MSSQL maintenance and optimisation.
- C# desktop apps for internal use; automation scripts (C#, PowerShell); zero-client rollout (NComputing); QA, suppliers and user support.



Analyst / Software Developer — Universidade Fernando Pessoa

Dec 2005 – Oct 2010

ufp.pt · Porto, Portugal · E-Learning

Higher-education organisation. Led the local Learning Management System (Sakai) implementation and contributed widely to the Sakai project. Appointed **Sakai Fellow** (2008).

- Implementation of the local LMS with Sakai: setup, configuration and maintenance of dev/production servers (CentOS); QA and deployment of every major/minor upgrade; monitoring; JVM load balancing; MySQL maintenance and optimisation.
- Development of internal/proprietary Sakai tools — roster interoperability, single sign-on, enterprise integration, thesis/dissertation supervision tool.
- Tight collaboration with the Sakai community: tools, bug fixes and features for the main code and 3rd-party contributions; participation in Sakai QA.
- Research on large RDF datastores for event tracking; speaker at international Sakai conferences; maintained local DSpace (B-Digital) and project wiki documentation.

**Software Developer, IT Director, Co-Founder — BlueSpan, Lda.**

Sep 2003 – Nov 2005

Águeda, Portugal · Electronics & Telecommunications

Startup delivering intelligent electronics and telecommunications solutions.

- Development of a multi-device management platform; specification and implementation of custom communication protocols.
- Java and LabVIEW development; Java desktop apps for internal use.
- Responsible for all company IT assets; network design and administration (Linux); QA, suppliers and management tasks.

**Software Developer, System Administrator — Multiwave Photonics, S.A.**

Dec 2001 – Jun 2003

Maia, Portugal · Fiber-optic technologies

Startup offering next-generation pulsed fiber lasers and fiber-optic optical sources.

- Device management/configuration software in Java; Java and LabVIEW instrumentation software; internal stock-management application.
- Responsible for all company IT assets; network design and administration (Active Directory).

EDUCATION & TRAINING

Licenciatura — Ciências de Computadores (Computer Science)

1996 – 2001

Faculdade de Ciências, Universidade do Porto (FCUP) · Final classification: 14/20

Programming, fundamentals, information systems, systems & network administration, web technologies; building computer applications with appropriate choice of algorithms, languages, libraries and user interfaces.

Certified LabVIEW Developer (CLD)

National Instruments · Feb–Mar 2002

ILOG JTGO & JViews Training

IBM ILOG · Oct–Nov 2001

Professional Training Placement (19/20)

Empresa Nacional de Telecomunicações (EFACEC Group) · 2001

LANGUAGES

Language	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
Portuguese	Mother tongue				
English	C1	C1	C1	C1	C2

Levels: A1/A2 Basic · B1/B2 Independent · C1/C2 Proficient (Common European Framework of Reference for Languages).

ADDITIONAL SKILLS

Organisational / managerial

High adaptability Creative problem-solver

Team spirit Self-organised & disciplined

Focused & dedicated Entrepreneurial

Work with passion

Communication

Gained as an active Sakai contributor — periodic video-conference meetings, speaking at international Sakai conferences, and daily community communication via mail/chat.

Digital skills: Proficient user — information processing, communication, content creation, safety and problem solving. **Other:** passionate surfer, meditation, tech-savvy, continuous self-improvement.

HONOURS & AWARDS

Sakai Fellow

2008

Awarded at the 9th Sakai Conference (Paris, June 2008) — a distinction recognising innovative and quality contributions to the Sakai (now Apereo) community, fostering leadership and active contribution to the open-source project.

CONFERENCE PRESENTATIONS

- "Site Stats — the power of event tracking at a single click in Sakai" — 3rd European Regional Sakai Conference, Valencia (Mar 2010).
- "My students and shared resources — design of a student supervision tool" — 3rd European Regional Sakai Conference, Valencia (Mar 2010).
- "UX at UFPUV — people using Sakai for their context" — 7th Sakai Conference, Amsterdam (Jun 2007).
- "UFP Tools Development" — 7th Sakai Conference, Amsterdam (Jun 2007).
- "Managing large datastores using RDF databases: an experiment in event tracking" — 2.^a Conferência Ibérica de Sistemas e Tecnologias de Informação (Jun 2007).

SELECTED PROJECTS

Juris by AI

AI legal transcription & analysis platform · Cloudflare-native (jurisby.com)

PatternVault

macOS app for systematic traders · SwiftData / Swift Charts (in development)

Paw

macOS HTTP client / API tool · acquired by RapidAPI, then Nokia

Flavours 2 / Flavours Classic

macOS theming apps + online store

Epic — Surf Report & Forecast

iOS / watchOS / widgets app · featured in Apple's "Surf's Up" collection

Sherpany Boardroom

offline-first enterprise iPad app · encrypted Core Data

ThemeKit

macOS theming framework (open source)

TESTIMONIALS

"Nuno is one of those colleagues that will stick to your mind even years after working together. It's not common to find someone who's so curious, eager to find solutions and to do things well, a true engineer. On top of this, he's a wonderful human being and a remarkable colleague — a big plus to any development team that needs heavy cooperation and teamwork."

Ricardo Silveira Antunes — People facilitator while solving challenges | Engineer at heart (LinkedIn, 2026)

"It is also fair to highlight the work carried out by the team responsible for preparing the launch of the Virtual University (UFP-UV) in 2008–09, specifically the operational component with Nuno Fernandes, who the Sakai consortium (MIT; Harvard; Stanford and Michigan) has just appointed Sakai Fellow for his contribution, at UFP, to improving the operationalisation of the e-learning platform we use."

Prof. Doutor Salvato Trigo — Rector, University Fernando Pessoa (UFP News #09, 2008)

"Nuno has been the main technical lead for the UFP's Virtual University project until his departure in Oct 2010. During his time on the project, Nuno showed unrivalled technical, groupwork and personal skills from which not only UFP but the whole Sakai project benefited. It was a pleasure to work with him."

Feliz Gouveia — Associate Professor, University Fernando Pessoa

"Nuno is an excellent professional and good character. He served as principal programmer and produced several tools assisting the UFP Virtual University (UFP-UV) initiative — now part of the Sakai software worldwide. He gained recognition from the Sakai Foundation with the Sakai Fellow in 2008, and consistently proves he has the technical skills and qualities to excel in complex technical projects."

Luís Borges Gouveia — Associate Professor (with aggregation), University Fernando Pessoa

"Nuno is a highly skilled software developer with very good analysis capacity and problem-solving techniques."

David Roldán Martínez — Information Architect & Open Source Project Contributor

ANNEX

Licenciatura (Computer Science) degree certificate — Faculdade de Ciências, Universidade do Porto (concluded 2001-07-20, final classification 14/20). Available on request.