

ISAAC BERNAT

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Staff Software Engineer with 12+ years of experience in backend systems, architecture and product strategy. A proven leader of high-impact initiatives, delivering a **+3% global Gross Margin lift** and architecting the core subscription platform that secured a **Series C funding round**.

PROFESSIONAL EXPERIENCE

- **Independent Professional Development** Aug 2024 – Present
 - Authored a production-level system design for a heuristic-based Spam Classification Engine.
 - Developed open-source tools, including a Python/LLM data pipeline and 'netflix-to-srt' (★ 800+).

Preply Barcelona, Spain (Remote)

- **Staff Backend Engineer** Jun 2022 – Jul 2024
 - Drove the company's #1 most impactful initiative of 2023 (out of 215 A/B tests), delivering a **+3% global Gross Margin lift** by overhauling subscription cancellation and pause policies.
 - ➔ Case Study: Strategy & Data-Driven Decision Making
 - Acted as a strategic technical advisor, identifying critical risks in a major initiative and advocating for a phased approach that mitigated over **10,000 hours** in potential wasted development.
 - Proactively identified and mitigated critical financial exploits, including an automated abuse vector that leveraged payment processing thresholds. Designed and implemented a rate-limiting solution that eliminated the vulnerability while preserving legitimate user functionality.

- **Senior Backend Engineer** Mar 2020 – Jun 2022
 - Served as the founding backend architect for the Subscription MVP, designed the core services and orchestrated the cross-team integrations (Payments, CRM, Data, Customer Success) required for a new recurring revenue system. This foundational work delivered a **+41% YoY increase in LTV**, improved the **LTV-to-CAC ratio from 1.4x to 3.0x** and was instrumental in securing a **Series C funding round**.
 - ➔ Case Study: MVP Architecture Product Strategy
 - Commanded 15+ production incidents and used the post-mortem from a critical SEV-2 to establish a mandatory, company-wide policy on pre-launch monitoring and observability.
 - ➔ Case Study: Incident Retrospective & Key Learnings
 - Led the backend migration of a high-traffic (1M+ MAU) application to a GraphQL API, improving page load times by **>85%** and unblocking A/B tests that resulted in an **+800% CVR increase**.

Ivbar Institute Stockholm, Sweden

- **Fullstack Engineer** Jan 2019 – Mar 2020
 - Selected to speak at **PyCon Sweden 2019**, where I presented a deep-dive on code optimization that demonstrated a **> 10¹⁸x performance improvement**.
 - Engineered the UI for complex medical case-mix decision trees, empowering healthcare professionals to better analyze treatment pathways.
- **Backend Engineer** Mar 2018 – Jan 2019
 - Architected the core data processing engine for the Swedish National Quality Registry for Breast Cancer (NKBC), enabling nationwide analysis of treatment outcomes.
 - Implemented MECE-compliant privacy filters to ensure patient k-anonymity in highly sensitive medical datasets, a critical requirement for ethical data handling.

Productos Aditivos Montcada, Spain

- **CTO & CFO** Jun 2016 – Jan 2018
 - Drove technology modernization and financial optimization, securing over **€64,000 in savings** by renegotiating commercial loans and rectifying payroll errors.
 - Oversaw a critical ERP migration and directed the company-wide transition to the Spanish SII real-time tax reporting system.

Wrapp

Oct 2012 – Jun 2016

Stockholm, Sweden

• Tech Lead

Sep 2014 – Jun 2016

- As a technical leader for the company's "2.0" pivot, guided the architectural transition from a monolith to a distributed system of **50+ microservices** in Go and Python.
- Owned two of the most critical backend services: 'users' (Python) and 'offers' (Go). As maintainer of the 'offers' service, I was responsible for code quality and architectural consistency across **1,200+ commits** from 12 contributors. This service ensured credit card transactions mapped to merchant offers.
- Architected and built "Opsweb," a mission-critical internal deployment system for managing canary releases, directly improving developer experience and stability.

• Early Engineer (Backend, Data, Frontend)

Oct 2012 – Sep 2014

- Developed and maintained a heuristic-based fraud prevention system to detect and block abuse of the platform's gift card and coupon features, protecting against financial loss from fake user profiles.
- Engineered foundational data systems, including the company's first content recommendation engine and a high-volume ETL pipeline for our Redshift data warehouse.
- Collaborated effectively in an asynchronous, multi-time-zone environment with teams in Stockholm and San Francisco.
- Selected to speak at the inaugural **PyCon Sweden** on building developer tooling.

FXstreet.com

Barcelona, Spain

• Software Developer

Feb 2012 – Jul 2012

- Contributed to a high-traffic C#/.NET financial news portal, handling complex internationalization (i18n) challenges across **17 languages**.

KEY PROJECTS & PRESENTATIONS

System Design: Heuristic-based Spam Classifier

- Authored a production-level technical design for a proof-of-concept spam classifier, demonstrating a pragmatic approach to building new features within legacy ecosystems.

🔗 [Link: Full Design Document](#)

PyCon Sweden 2019: From >1 Billion Years to <1 Second

- Presented a deep-dive on iterative code optimization techniques, showcasing a **> 10¹⁸x performance improvement** with comparisons between Python, PyPy and C++.

📺 [Link: Full Talk on YouTube](#)

Open Source: netflix-to-srt

- Creator and maintainer of a popular open-source tool with **★ 800+ on GitHub** that solves a common community need for converting subtitle formats.

🔗 [Link: Project Repository](#)

CORE COMPETENCIES

Programming Languages:

Python (Expert), Go, SQL, JavaScript, C++

Platforms & Databases:

AWS, PostgreSQL, Docker, Git, MySQL, Redshift

Architecture & Design:

Distributed Systems, APIs (GraphQL, REST), Performance Optimization

Practices & Methodologies:

A/B Testing, TDD, Product Strategy, Incident Management, AI-Assisted Development

EDUCATION & LANGUAGES

M.Sc. in Informatics Engineering, Highest Honours

2006 – 2011

Universitat Politècnica de Catalunya (UPC) & NTNU

Barcelona, Spain & Trondheim, Norway

- Master's Thesis on Test-Driven Conceptual Modelling conducted at the Norwegian University of Science and Technology (NTNU) as part of the ERASMUS programme.
- Awarded the highest possible grade (A with Highest Honours) from both institutions.

Languages

- **Native:** Catalan, Spanish • **Full Professional Proficiency:** English (C2) • **Elementary:** Swedish