ISAAC BERNAT

𝚱 Portfolio: isaacbernat.com/cv • 🗖 cv@isaacbernat.com • 🛅 LinkedIn: /in/isaacbernat • 🞧 GitHub: /isaacbernat

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

Mar 2020 - Jul 2024

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.
- Exhibited cross-domain ownership by proactively identifying and leading the mitigation of critical production bugs, including a promotions flaw costing \$21,000/week and a runaway Celery task executing over 1M times/hour.
- Senior Backend Engineer

Mar 2020 – Jun 2022

- Served as the founding backend architect for the Subscription MVP, leading the technical transition to a recurring revenue system. This work was instrumental in securing a **Series C funding round**, delivering a **+41% YoY increase in LTV** and improving the **LTV-to-CAC ratio from 1.4x to 3.0x**.
 - 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

Mar 2018 - Mar 2020

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.

• Tech Lead Sep 2014 – Jun 2016

- Guided the company's technical pivot from a Python 2.7/Twisted monolith to a modern Go/Python 3
 microservice architecture.
- Architected and built "Opsweb," a mission-critical internal deployment system for managing canary releases of our **50+ microservices** to AWS.

• Early Engineer (Backend, Data, Frontend)

Oct 2012 - Sep 2014

- Engineered core systems from scratch, including the company's first content recommendation engine and an A/B testing email framework which served **1M+ weekly newsletters**.
- 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.

Dink: Full Design Document

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

- Presented a deep-dive on iterative code optimization techniques, showcasing a $> 10^{18}x$ 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.

Chink: Project Repository

CORE COMPETENCIES

Programming Languages:
Python (Expert), Go, SQL, JavaScript, C++
Platforms & Databases:
Architecture & Systems:
System Design, Backend Development, REST APIs, GraphQL, 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