

Jacques LOVI

Software architecture · Compilers & languages · Product development



CONTACT

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CORE EXPERTISE

C / C++ · SQL

Compilers & interpreters
Code transformation
Software architecture
Developer tools

ADDITIONAL EXPERIENCE

Some Qt experience

CURRENT DEVELOPMENT

Python · REST APIs
HTML / CSS / JavaScript
Kotlin Multiplatform

AI-assisted
implementation
Git & integration

VALUES

Teaming
Authenticity
Loyalty
Independence
Flexibility

*Understanding deeply.
Keeping things practical.*

I explore the problems behind the immediate need to build practical software, from critical business systems to my own products. My aim: make complexity manageable and help people work together.

SELECTED ENGINEERING RESULTS

u-blox · Build systems

From overnight builds to minutes

Moved two complex projects to cross-platform CMake/Ninja builds, reducing build times **from a night or more to minutes**.

IBM · Hospital billing

A compiler instead of a rewrite

Conceived and led a migration compiler: **one person-year instead of tens** for a rewrite. Later reused independently by another engineer to translate the evolved application.

IBM · Interbank settlement

Safe transformation of critical code

Led a four-person team developing interactive code-cleanup tools for an extremely critical system. **All existing tests passed, and no defects attributable to the code transformations were detected.**

WHAT I'M BUILDING

InZeMobile · 2020–present

Independent conception, architecture and development, using AI assistance for implementation.

IziBuddy & POO²L

An unusual approach to prompts: a deterministic, object-oriented declarative language I designed, with no embedded algorithms and a public specification.

InZeWishBox

Tasks and rewards for families, classrooms and groups, with agreed rules, adjustable autonomy and end-to-end encrypted exchanges.

InZeDoku

Offline, ad-free puzzles for logic and learning. Adaptable symbols and arithmetic, printable grids and shared classroom activities.

IziForge

In development

Application-building tools combining my Harpoon model — hierarchical, object-oriented Petri nets and state machines — with formula-based interface design.

BEYOND THIS CV

Who am I, how do I work, and what can I contribute?
Explore the products, project stories and colleagues' perspectives.

jacques.lovi.com ↗

Experience & foundations

2020–present	InZeMobile Independent software development Conception, architecture and development of my own products, presented on page one.
2021–2025	Acerta / Sopra Steria (Tobania) Software Engineer Maintained and extended Arno HR: MFC/C++ interfaces, a formula interpreter and translation of parameterised queries into SQL. Worked with Jira, Confluence and TFS.
2016–2020	u-blox Software Engineer Developed and maintained a C/C++ compiler for VLIW vector signal processors. Worked on memory mapping, flow-graph transformations and generated-code optimisation; modernised builds with CMake and Ninja.
1997–2016	IBM Software / Systems Engineer · Project Manager Healthcare, banking, industry and public administration. Further contributions included: • Knowledge transfer: took over critical hospital billing software in an unfamiliar language; began training a colleague with no prior IT background after one year. He succeeded me when I left the position two years later. • Unix automation: connected heterogeneous maintenance data and audit logs. The team became an audit benchmark; other teams followed with their own automation. • Project recovery: rebuilt the plan and negotiated staffing for a loss-making €2M project. Requested my own replacement for the final stage when team momentum faltered. The project finished with a modest profit.
1996–1997	Elscint · Israel Software Engineer Maintained a fourth-generation language engine used in CT scanner software and supported developers in C++. On my own time, independently designed Harpoon to understand the underlying problems.
1994–1996	Highway Productions / RTL Informatique Software Engineer Macintosh CD-ROM applications for Belgacom and Trends, with reusable database and interface libraries; client/server systems for AFP and live broadcast information at Vincennes Hippodrome.

EDUCATION & DEVELOPMENT

Master's degree in Computer Science

Université libre de Bruxelles · 1994 · With honours

Operating systems specialisation; thesis on analysing tissue blood flow from Doppler data.

Further training in project management, team leadership, communication, AIX administration and high availability.

LANGUAGES

French	Native
English	C1
Dutch	B1

BEYOND ENGINEERING

Writing, history and science.
Hands-on exploration of electronics.