Jerome MILAN
Software engineer
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Professional Experience

Since 03/2025 **Backend software Engineer** at Pelico (www.pelico.io)
- Backend development in Kotlin

09/2021 - 02/2025 **Software Engineer** at Norbert Health (www.norberthealth.com)
- Design and development:
  - Embedded side on Jetson Nano: legacy & new device features in C++, Python 3, ZMQ, Vue.js (move to inference server, new application logic/features, debugging, *etc.*)
  - QA dev toolings: new toolchain to run data playback locally or on CI (Python 3, GitLab, AWS)
  - Backend: legacy and new AWS Lambdas (Go/Python 3), chatbot POC (Python 3, Langchain)
  - ETLs and reporting (GitLab CI/CD, MongoDB, BigQuery, AWS)
- DevOps:
  - Legacy and new CI/CD pipelines/workflows (GitLab, Docker, AWS)
  - Infra admin (AWS, GCP)

2019 - 2021 **Head of R&D** at Homa Games (homagames.com)
- Data engineering with Python 3 (ETL pipelines), AWS Redshift

2015 - 2019 **Head of R&D/Data scientist** at BidMotion (www.bidmotion.com)
- Data mining and machine learning using Apache Spark on EC2 (with Java and Scala) and Python 3

2014 - 2015 **R&D developer** at KoDe Software (a company developing an alternative SQL engine)
- Authentication, access rights management, task scheduler (C++ mostly, Java)

2012 - 2014 **Back-end/R&D developer** at SCM France (www.leboncoin.fr)
- Back-end: new features and optimisations (C, PostgreSQL, jQuery)
- R&D: development of an automated moderation tool (pattern detection, ad hoc rules, inference) in C

2005 - 2012 **Software Engineer** in the Cryptology team of Ecole Polytechnique's Computer Science Laboratory (LIX), Palaiseau, France. Interested in integer factorization (bit.ly/2m1x6kl), pairings over elliptic curves (bit.ly/2u9wv3T) and elliptic curve cryptography in ad-hoc networks (bit.ly/2Nw42hJ).

2000 - 2001 **Research Engineer** in the Nuclear Chemistry Group of the State University of New York at Stony Brook, USA (bit.ly/2KWnNgu). Involved in the elliptic flow studies on the Phenix experiment at the Relativistic Heavy Ion Collider of the Brookhaven National Laboratory.

Computer Science Education

2003 - 2004 **Master's Degree in Mathematics and Computer Science in Cryptology, Security, Coding Theory**
Joseph Fourier University, Grenoble, France

2002 - 2003 **Master's Degree in Software Engineering and Distributed Systems and Networks**
Joseph Fourier University, Grenoble, France

Main Internships

03-09/2004 **Digital images steganalysis with machine learning**
Images and Signals Laboratory, French National Center for Scientific Research (CNRS), France

01-09/2003 **Design of a distributed framework for genetic data federation**
TIMC Laboratory, Informatics and Applied Mathematics Institute of Grenoble (IMAG), France

01-09/2002 **Theoretical study of the entangled states of quantum computing**
Leibniz Laboratory, Informatics and Applied Mathematics School of Grenoble (ENSIMAG), France

Physics Education

1998 - 1999 **Master's Degree in Particle and Nuclear Physics**
Joseph Fourier University, Grenoble, France

1997 - 1998 **Bachelor's Degree in Physics** as part of the Education Abroad Program
University of California at Los Angeles, USA

Main Internship

03-07/1998 **Influence of VIRGO's transfer function on a coalescing binary stars detection algorithm**
Particle Physics Laboratory of Annecy-le-Vieux (LAPP), France

Technical Proficiencies

Systems GNU/Linux, Unix, macOS

Languages & Techs Mainly C/C++, Java, Perl, Python, and also SQL, PHP, Scala, Apache Spark, AWS, GCP, *etc.*

Softwares Magma, PARI/GP, Root, LaTeX

Miscellaneous

Languages French : mother tongue
English : fluent