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GitHub Stats

☆ 1333 GitHub Stars

1 7 Years In Industry

4 Published Packages

 $\mathbf{\mathfrak{D}}$ 3 Competition Wins

Education

Master - Data Science

Ecole Polytechnique Federale de Lausanne

2019 | GPA: 5.16/6

Bachelor - Communication Systems

Ecole Polytechnique Federale de Lausanne

2016

Competitions

LauzHack - 2017

Hackathon
1st place (Cisco Challenge)

Machine Learning - 2017

Competition

1st / 63 Tweet Sentiment Analysis

Data Visualization - 2017

Competition 15th / 160

Start Hack - 2016

Hackathon

1st place (Zühlke Robochalenge)

IEEE Extreme - 2015

Competition 136th / 2000 (5th in Switzerland)

Jimi Vaubien

AI Engineer

Senior Machine Learning Engineer with 7 years building production AI systems from research to deployment. At Prometee, I led the development of a GenAI platform serving 4 production client companies, managing a team of 3 engineers. My work spans the full AI stack: training custom models at Schlumberger (10x speedup), deploying fraud detection systems running 2+ years in banking/pharma at Visium, and building LLM-powered agents with human-in-the-loop architectures. Creator of open source tools with 1,300+ GitHub stars and published packages across PyPI, npm, and crates.io. I speak at AI conferences and teach modern development practices through workshops and my YouTube channel.

Open Source

Featured Packages

Kiru (8☆) https://github.com/bitswired/kiru

 $\label{thm:mass} \mbox{High-performance text chunking library for RAG applications with Rust core and Python bindings.}$

FoldCMS (23☆) https://github.com/bitswired/foldcms

Type-safe content management system built with Effect, supporting multiple formats with SQLite-backed performance.

LazyCodr (45☆) https://github.com/bitswired/lazycodr

AI-powered CLI tool for automating developer workflows including PR descriptions, commit messages, and documentation.

Featured Projects & Tutorials

RustGPT (699☆) https://github.com/bitswired/rustgpt

ChatGPT UI built with Rust and HTMX demonstrating modern web development without JavaScript frameworks.

FuseAI (293☆) https://github.com/bitswired/fuseai

Self-hosted open-source web application for interacting with OpenAI APIs, supporting multi-user deployments with Docker.

$\textbf{Website-to-Knowledge-Base} \quad \textbf{(79\,?)} \quad \underline{\texttt{https://github.com/bitswired/website-to-knowledge-base}}$

AI-powered knowledge base converting websites into searchable LLM-powered Q&A systems with source citations.

Demos (62☆) https://github.com/bitswired/demos

Complete source code repository for Bitswired YouTube channel tutorials covering Effect, Python, MCP, AI agents, and advanced web development.

Professional Experiences

Lead AI Engineer

Prometee

2023 - 2026, 🛇 Lausanne, CH

Led AI engineering team building GenAI platform and custom AI agents for enterprise clients across finance, accounting, and trading sectors.

Impact: Deployed GenAI platform to 4 production clients; automated financial audit
workflows eliminating manual document tagging; built trade settlement agent handling
complex email-based workflows with human-in-the-loop fallback

Data Engineer

Proxinea

2023, 🔘 Zurich, CH

Modernized data infrastructure for pricing and churn models, migrating manual SQL pipelines to DBT and Dagster with robust CI/CD.

Impact: Successfully migrated manual SQL pipelines to automated DBT/Dagster architecture; implemented modern CI/CD pipeline with semantic versioning

Skills

Languages

- · Python (7 years)
- · TypeScript (5 years)
- · SQL (6 years)
- · Rust (2 years)

ML Frameworks

- · PyTorch
- · Tensorflow/Keras
- · Hugging Face

LLM & GenAI

- · Gemini / OpenAI / Claude
- · RAG Systems
- · Agents / Multi-Agent Systems
- · Vector Databases

Cloud Platforms

- · GCP
- · Azure
- · Cloudflare
- · AWS

Dev0ps

- · Docker
- · Terraform
- · Kubernetes

Data Engineering

- · DBT
- · Dagster
- · Apache Beam

Databases

- · PostgreSQL
- · Redis

Web Frameworks

- · FastAPI
- · Bun/Node
- · React
- · HTMX
- · Axum

Misc

Nationality: French

Swiss Residency: **C Permit**Birth Date: **1993-07-14**

Spoken Languages: French, English

Senior Machine Learning Engineer

Visium Technologies SA

2018 - 2023, 🛇 Lausanne, CH

Developed and deployed end-to-end AI solutions for clients across banking, pharma, and e-commerce, progressing from part-time engineer to senior while managing technical teams.

Impact: Delivered multiple production systems running 2+ years in banking and pharma,
passed external security audits, with solutions reused across projects

Main Teaching Assistant & Full Stack Development

Universite De Lausanne

2018 - 2026, 🔘 Lausanne, CH

Principal TA for Python course and full-stack developer for job seeker web application with A/B testing, now used by state administrations.

Impact: Web application adopted by official state administrations

Research Intern - Master Thesis

NEC Labs

2019, 🔘 Princeton, USA

Researched unsupervised deep learning for manufacturing defect detection using One Class SVM, Autoencoders, and GANs.

Impact: 6/6 grade

Teaching Assistant - Information, Computation and Communication

Ecole Polytechnique Federale Lausanne

2016 - 2019, 🔘 Lausanne, CH

Reviewed lab content, assisted students during exercise sessions, and graded exams.

Teaching Assistant - Computer Networks

Ecole Polytechnique Federale Lausanne

2016 - 2018, 🔘 Lausanne, CH

Reviewed lab content, assisted students during exercise sessions, and graded exams.

Research Intern

Schlumberger Doll Research

2017, 🔘 Boston, USA

Accelerated geological simulations 10x using Conditional GANs and developed RNN-based time series predictions for sea level modeling.

Impact: Achieved 10x speedup versus physics-based simulation; predictions integrated
into downstream modules

Full Stack Developer

Vlynt

2017, 🛇 Lausanne, CH

Developed server load balancing solution including CRUD APIs, React components, and D3.js visualizations.

Impact: Successfully shipped features to production

Full Stack Developer

TasteHit

2016 - 2017, 🔘 Lausanne, CH

Built embeddable real-time search widget for eCommerce recommendation engine at startup that became MassChallenge finalist and was acquired.

Impact: Company became MassChallenge incubator finalist and was subsequently acquired