



Christoph Hrdinka

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● ABOUT ME

Grew up in Lower Austria, Bad Fischau-Brunn near Wr. Neustadt. Lived in Vienna for 9 years and living in Germany since 2023.

Solving problems is what I do all day long and for what I get up every morning. Some are of private nature but most are professional. Usually they resolve around:

- Technical lead and work. I lead the technical work for our companies' projects and am programming or solving engineering problems for work and in my free time for private or open source projects.
- Research of new technologies, mostly around AI, LLMs, data analysis and high performance computing
- Project coordination of EU and national joint projects
- Management of my companies, including the usual work delegation, communication, sales, short and long term planning, as well as solving whatever is bubbling up on a day to day basis

All this and my upbringing made me being used to having huge responsibilities for several different things at a time. I thrive in stressful situations, always keep calm, put out fires as they arise and love to find creative and simple solutions to hard problems. Structured technical and mathematical work is as much liked by me as bringing order to chaos and solving interpersonal problems. Learning new things and wandering unknown territory is what keeps me alive and I enjoy being very busy without any fear of getting my hands dirty.

● WORK EXPERIENCE

07/2019 – CURRENT Vienna, Austria

CO-OWNER & CEO

Founded [SWISDATA gemeinnützig GmbH](#) together with my partner Marian Lux. SWISDATA is a non profit research oriented company that focuses on AI, data analysis, digitization to support environmental sustainability and social equity, and coordination of public funded research projects.

01/2019 – CURRENT Vienna, Austria

CO-OWNER & CEO LUXACTIVE KG

Merged my first company with [LuxActive KG](#) and became legal partner with Marian Lux. We have already been working together for roughly ten years at this point in both commercial and public funded projects. LuxActive was initially developing products for the tourism sector. Due our fast momentum and numerous features we quickly entered other domains like the public and industrial sector. Today we focus on public funded research projects and commercial projects using digitization to simplify complex processes. We regularly develop new custom solutions, offer consultancy, research new technologies and maintain our existing products and software.

05/2012 – 01/2019 Vienna, Austria

OWNER, CEO CHRISTOPH HRDINKA E.U.

Foundation of my first legal IT company, with contract work and custom products. For example two self developed ERP systems for food wholesale merchants, other business applications, consulting for several companies to build high performant distributed systems, data analysis, AI and web apps.

05/2009 – 08/2012 Wr. Neustadt, Austria

MECHATRONIC TECHNICIAN SCHLOSS UND RIEGEL GMBH

Part-time technician for installing alarm systems at companies and private homes to finance the set-up of my first company

MILITARY SERVICE

Trained as Panzergrandier (armored infantryman) and got requested to work in the command of Heerestruppenschule (army school). I got decorated with the coin of the commander as first non fighting unit in Austria for developing a personnel management and qualification tracking tool.

2003 – 2008 Wr. Neustadt, Austria

INTERNSHIPS AND PART TIME JOBS AT SCHLOSS UND RIEGEL GMBH, EWA GMBH, I-ALARMSYSTEME GMBH, INFOTRONIK GMBH

Many internships and part time jobs besides school. I did assembly and installations of letterboxes, installations of alarm systems at companies and private homes. Assembled and configured touch screen terminals for one company and ended up developing an order management tool for them.

1997 – CURRENT

START OF TECHNICAL CARRIER

Started by self learning electric and mechanical engineering. Started computer and IC (together with electronic and mechanical engineering, like robotics) programming in 1999. First sale and commercial project was in 2003. Today I worked on more than a hundred private, public and commercial projects.

LANGUAGE SKILLS

Mother tongue(s): **GERMAN**

Other language(s): **ENGLISH**

DIGITAL SKILLS

Currently in most active use

Haskell | Zig | Elm | PostgreSQL, SQL, PL/pgSQL and Python | Nix | Purescript | Linux | Vulkan | HTML | CSS | Git | Shell | Python | Javascript

Others I currently use less often, have written projects in or compilers/WMs/interpreters for

Adga | APL2 | Basic | C | C++ | D | go | C# | Coffeescript | Dylan | Erlang | FORTH | Fortran | Futhark | Idris | Java | LLVM-IR | Logo | Lua | MySQL | NXC | OpenCL | Open GL | Oracle | Pascal | Pearl | PHP | Roy | Rust | Several assemblers | Several Lisp dialects (CL, XLisp, GNU, Scheme, Racket ,...) | Verilog | VHDL | Visual Basic | Typescript | And all the others I have forgotten, sorry

Self developed languages

C4 | Freespace | Preamble

SOCIAL AND POLITICAL ACTIVITIES

2007 – 2014 Bad Fischau Brunn and around

Event organization

of several public events and festivals in and around my home municipality

2005 – 2014

Involvement in local government

mostly focused on improving my home municipality for the youth, with a leading local political role later on

DRIVING LICENCE

Driving Licence: B

● PROJECTS

01/10/2024 – 30/09/2025

CloudShadingAI

Prediction of cloud extents (horizontal & vertical) and movement from satellite sensor and weather data. Generation of shadow maps based on clouds and terrain features. Involvement: conception, proposal writing, technical lead for LuxActive

01/07/2024 – CURRENT

Automized semantic layer creation

Research and proof of concept development of a LLM and AI based system for automatic semantic layer creation of arbitrary user data. The semantic layer can then be used by several systems, but especially by LLMs for creating data queries from natural language. Involvement: conception, proposal writing, technical lead, project coordination

03/2024 – CURRENT

SRI-CHATPED

SUSTAIN Euro Cluster Open Call project to extend our personal energy management app with a LLM based chatbot to boost and promote Smart Readiness Indicators (SRI). Involvement: conception, proposal writing, technical lead, project coordination

Link <https://www.sustaineurocluster.com/>

12/2023 – CURRENT

CUBIC-PM

Use advanced analytics to combine process models created from usage and log data with context data like weather forecasts. Implement a LLM based chatbot to allow users to simply answer any questions regarding their user statistics and analytics including the generation of graphs and charts. Involvement: conception, proposal writing, technical lead, project coordination

Links <https://projekte.ffg.at/projekt/5120472> | <https://www.luxactive.com/cubic-pm-project/>

11/2021 – 04/2022

PEDMaker

SYNERGY (H2020) cascaded funding open call project. Development of a personal energy management app that guides and trains users like a personal fitness app to optimize their energy usage. Uses simulation and AI technologies to smartly match users to create fitting energy communities. Currently being extended in many other projects with a chatbot and energy community management and used in several areas. Involvement: conception, proposal writing, technical lead, project coordination

Links <https://www.luxactive.com/energy-pedmaker-app/> | <https://www.luxactive.com/energy-app-synergy/>

01/2021 – CURRENT

AURORAL

16 Mio Eur H2020 project to foster digitization and interoperability in rural areas, to support existing and create new Smart Communities. Involvement: lead of LuxActive as technical partner, project coordinator since end of 2023

Link <https://www.auroral.eu/>

02/2019 – CURRENT

KälteApp

smartphone and web app to report homeless people sleeping in the streets of Vienna to get them help. Contracted by Fonds Soziales Wien (social help of Vienna). Involvement: sales, conception, project management, technical lead

Link <https://www.luxactive.com/kealte-app/>

08/2019 – 01/2023

Future Data Assets

Extension of the SWIS infrastructure to extract knowledge, analytics and data from heterogeneous company data. Involvement: conception, proposal writing, technical lead, project coordination

Links <https://future-data-assets.de/> | https://www.digitale-technologien.de/DT/Redaktion/DE/Standardartikel/Smarte-Datenwirtschaft-Projekte/SDW_future_data_assets.html | <https://projekte.ffg.at/projekt/3314718>

10/2018 – 12/2019

SWIS

Extension of the SWIS infrastructure with new services and commoditization of many services involved. Involvement: conception, proposal writing, technical lead, project coordination

Links <https://projekte.ffg.at/projekt/3121773> | <https://www.luxactive.com/swiss/> | <https://www.luxactive.com/2018/10/19/luxactive-bei-der-ignite-night/>

12/2016 – 02/2018

Multi-Information

Creation of the Scraper&Crawler infrastructure to download the web and extract information from it using AI technology. Development of two in-house machine learning and natural language processing/understanding libraries/frameworks. Newly researched knowledge extraction and question answering algorithms. Involvement: conception, proposal writing, technical lead, project coordination

Links <https://projekte.ffg.at/projekt/2708865> | <https://www.luxactive.com/oha-r-and-d/> | <https://www.luxactive.com/2020/11/05/ein-smarter-assistent-der-mir-jede-frage-beantwortet-oha-f-e/>

2013 – CURRENT

oHA

One of LuxActive's main products. Started as regional management solution for tourism providers. Today it is used in many domains like tourism, public sector and e-commerce. Offers solutions to sell things and services, regional point cards, info system, tourguide and geo information, car-sharing, bike-sharing, shuttle/taxi workforce management/planning/ordering, shuttle bus tracking and plan system, citizen communication, smart city (data) management, etc. Involvement: technical lead, sales, management

Links <https://www.luxactive.com/de/tourismus/> | <https://www.luxactive.com/de/mobilitaet/> | <https://www.luxactive.com/de/public-sector/>

● MANAGEMENT AND LEADERSHIP SKILLS

My entrepreneurial carrier

builds on and improves my management and leadership skills on a daily basis. I am used to learn fast, on my own and to navigate in at least for me uncharted territory. After learning technical skills very early on I now really enjoy to improve my leadership and person skills by doing the actual job and more importantly by learning from others that I encounter, trust or read about.

● HOBBIES AND INTERESTS

Challenging my body and mind

is what I love and to find new and to refine possessed creative outlets and skills. No months has gone by in my life where I haven't dipped my toe into some new topic. Currently I am mostly interested in:

- Sports like day(s) long hikes, mountaineering, working out. The more challenging it is the more I enjoy it, making my body and mind more resilient, calm and satisfied.
- Art is leading many parts of my life and is central to most things I do
- Botany
- Dog training
- Electrical and mechanical engineering, especially together with 3D printing and design
- Everything computer; currently mostly evolving around graphical and computer game programming, high performance computing, simulation, AI, dev-ops, microcontrollers and UI & (web) applications. I am programming since my early childhood, there is not really any topic left that I have not touched yet in the area of IT. From abstract formal work, compiler building and soldering to frontend UIs and real-time ray tracing – short I really enjoy programming computers.
- IT & physical security
- Photography

- Repairing, building and completely overhauling mechanical contraptions like old cameras and watches
- People problems, communication, psychology, leadership
- Scale modelling and sometimes building of remote controlled models like sub-marines, helicopters or planes
- Historic and contemporary research, mostly in social problems, wars and military. I find the military to be a great source of knowledge to become better in life and leadership.
- Craftsmanship, currently mainly furniture building involving mostly woodworking but also in combination with my 3D printers

● **COMMUNICATION AND INTERPERSONAL SKILLS**

Seminars, Workshops and self-learning

of all kind of communication and interpersonal skills, like leadership, conflict resolution/mediation, giving public talks/ speaks or how to discuss and learn. With direct guiding/coaching/cooperation or indirect through books/videos of experienced professionals like psychologists or renowned persons.

● **VOLUNTEERING**

2016 – CURRENT
NixOS developer

Official Nix/NixOS maintainer and developer. My contributions already started a few years earlier.