

CV as per
July 31, 2024



Andriy ZAVADA

General

Born	4 November, 1973 in Kharkov, USSR (now Ukraine)
Languages	English, Ukrainian, Russian; functional French and Dutch
Kids	2012, 2014
Home	Ukraine (Kyiv; since 2022, middle of beautiful nowhere in Zakarpattia)
www	johnhommer.com — github.com/hmmr — gitlab.com/hmmr — angel.co/andrei-zavada — http://ua.linkedin.com/pub/andrei-zavada/59/967/3a2 — @AndreiZavada
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Degrees and Qualifications

2007	PhD in in <i>Physiology</i> from the University of Groningen, The Netherlands. Dissertation Title: Defining and determining the properties of the human sleep homeostat. Supervisor & promotor: Domien G. M. Beersma.
1997	Masters in <i>Entomology</i> from Kharkov State University, Ukraine.

Affiliations/Employers

February 2021– <i>present</i>	TI Tokyo , remotely from Ukraine: Software Engineer (Erlang, Elixir)
January 2018–February 2021	Pypestream Inc. , remotely from Ukraine: Software Engineer (Erlang, Elixir)
May 2017–January 2018	Id3as LLC , remotely from Ukraine: Software Engineer (Erlang, JS, Elm)
December 2014–April 2017	(on contract) Basho Inc. , remotely from Ukraine, Georgia, briefly UK: Software Engineer (Erlang)
November 2013–December 2014	Massive Solutions , Ukraine: Software Engineer (Python)
June–October 2013	Clove Consulting Inc. , USA/Ukraine: Software Engineer (C++)
December 2012–May 2013	eMICT/Lotosoft , Ukraine: Software Engineer (C++)
July 2012–December 2012	StrikeAd , Ukraine: Software Engineer (Erlang)
June 2010–May 2012	Massive Solutions , Ukraine: Software Engineer (Erlang)
2008–10	University of Sussex, UK: Postdoctoral Research Fellow , modelling neuronal networks
2002–6	University of Groningen, The Netherlands: PhD student , Human sleep models

Affiliations/Employers (continued)

1998–9 Schmalhausen Institute of Zoology, Kiev, Ukraine: **aborted Cand. Sci. in entomology**

Skills

- Erlang/OTP: general expertise, with deeper coverage of cluster architecture and distributed systems. (*actively since 2010*).
- Elixir: Phoenix, Ecto: general expertise (to a lesser degree than Erlang). (*actively since 2018*).
- Riak: architecture and codebase; Rabbitmq, Postgres: know my way about. (*actively since 2015*).
- C++ (including C++11, excluding boost) and C: omp; strictly within glibc for all things covered; gsl, MPI; soci; pthreads; Lua (embedding) (*In use: regularly since 2008*).
- Python: learn-as-you-go (*In use: actively around 2013, occasionally since*).
- JavaScript (including node.js, npm, webpack, bower) (*occasionally since 2004, actively in 2017*); Elm; material design (paper) (*actively in 2017*).
- GNU toolchain: autotools, make, gcc (*actively since 2008*). Valgrind, gdb (*occasionally since 2008*).
- Packaging: Debian, OpenSUSE, Centos, Gentoo (own/primary dev system) (*regularly since 2011*). Docker (*occasionally since 2019*).
- git (*actively since 2010*)., subversion, CMake (*occasionally around 2013*).
- Jira, Redmine, Bugzilla (*regularly since 2010*).
- Linux administration (Debian, Gentoo) (*regularly since 2003*).
- PostgreSQL (*actively in 2013-2014, regularly in 2018*).
- GTK+: plain C and with Glade (*occasionally in 2008–15*).
- Emacs (*actively since 2004*).
- L^AT_EX, Octave, Gnuplot, Maxima, R (*regularly since 2004*).

Projects

- *closed source* **RDRive**, A Riak-backed filesystem with a WebDAV interface.
- **Riak CS**, Uplifting to current OTP from Basho days; two more major releases since (3.0–3.2).
- **Riak TS**, Uplift and merge onto current Riak; completing work on query buffers (thus enabling LIMIT and ORDER BY, substance of 1.6, first version some say could be actually sold).
- *closed source* **In-house Authentication As a Service thing**, an Elixir/Phoenix app with postgres backend, interfacing with Okta.
- **Riak TS**, contributions to riak_kv, riak_ql, riak_core, riak_api, riak-erlang-client. The Third Man on a team led by Gordon Guthrie.
- **VSC** (as part of a 3-strong team), a Virtual Super Computer middleware written in Python/C++ (my part being its billing system, with a Postgres backend). Abandoned at beta stage with tears due to investors withdrawing promised funds, with events of 2014 in Ukraine rumbling in the background.
- **Clustrx** (as part of a 3-5-strong team), a cluster management system written in Erlang/OTP. This system is probably still running on the Lomonosov HPC.
- *closed source* **video streaming** (at id3as), SCTE35 parser for MPEG4 TS, integrated in an in-house audio/video streaming and delivery platform, 70k of in Erlang/OTP code. Also, a web audio recorder and streamer Elm+JS app, using webpack.
- *closed source* A couple of **Elm projects** (at id3as)

Projects (continued)

- **Aghermann**, (public repo on **gitlab**) a Linux desktop app using GTK+. It is a sleep-research experiment manager, with a facility for reading, displaying, and scoring EEG recordings in EDF format. I am also packaging and maintaining it for Debian. Some 40k LOC written, and twice rewritten, over seven years in spare time, to prove something to someone who wouldn't even care to notice. Good playground for honing C++ skills, though.
- **CNrun**, (public repo on **gitlab**) a neuronal network simulator using NML for network description. Very precise but slow; with scripting capabilities in Lua. Packaged for Debian by me.