CV as per
July 17, 2025

Andriy ZAVADA

General

Born	1973 in Kharkov, USSR (now Ukraine)
Languages	English, Ukrainian, Russian; functional French and Dutch
Home	Ukraine (Kyiv; since 2022, middle of beautiful nowhere in Zakarpattia)
www	johnhommer.com | github.com/hmmr | gitlab.com/hmmr | wellfound.com/u/andrei-zavada | www.linkedin.com/in/andriy-zavada-3a296759 | @AndreiZavada
email	jh@johnhommer.com, johnhommer@gmail.com

Degrees and Qualifications

2007	**PhD** in *Physiology* from University of Groningen, The Netherlands. Dissertation: Defining and determining the properties of the human sleep homeostat. Supervisor: Domien G. M. Beersma; Promotor: Serge Daan.
1997	**Masters** in *Entomology* from Kharkov State University, Ukraine.

Affiliations/Employers

February 2021–*present*	**TI Tokyo**, remotely from Ukraine: **Software Engineer (Erlang, Elm)**
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**
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)*.
- LaTeX, Octave, Gnuplot, Maxima, R *(regularly since 2004)*.

Projects

- **Riak Control**, a rewrite in Elm.
- *closed source* **RDRive**, A Riak-backed WebDAV server.
- **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)
- **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.

Participation in conferences

November 2021 Fireside chat on *Riak* with Nicholas Adams, **CodeBEAM America 2021**.