

CV as per  
January 12, 2018



## Andrei ZAVADA

### General

Born	4 November, 1973 in Kharkov, USSR (now Ukraine)
Languages	English, Russian (mother tongue), Ukrainian; functional French and Dutch
Married	2007, two kids (2012, 2014)
Home	Kiev, Ukraine
www	johnhommer.com   github.com/hmmr   ua.linkedin.com/pub/andrei-zavada/59/967/3a2   @AndreiZavada
email	jh@johnhommer.com.

### Degrees and Qualifications

2007	<b>PhD</b> 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	<b>Masters</b> in <i>Entomology</i> from Kharkov State University, Ukraine.

### Affiliations/Employers

May 2017–January 2018	<b>Id3as LLC</b> , remotely from Ukraine: <b>Software Engineer (Erlang, JS, Elm)</b>
December 2014–April 2017	(on contract) <b>Basho Inc</b> , remotely from Ukraine, Georgia, briefly UK: <b>Software Engineer (Erlang)</b>
November 2013–December 2014	<b>Massive Solutions</b> , Ukraine: <b>Software Engineer (Python)</b>
June–October 2013	<b>Clove Consulting Inc.</b> , USA/Ukraine: <b>Software Engineer (C++)</b>
December 2012–May 2013	<b>eMICT/Lotosoft</b> , Ukraine: <b>Software Engineer (C++)</b>
July 2012–December 2012	<b>StrikeAd</b> , Ukraine: <b>Software Engineer (Erlang)</b>
June 2010–May 2012	<b>Massive Solutions</b> , Ukraine: <b>Software Engineer (Erlang)</b>
2008–10	University of Sussex, UK: <b>Postdoctoral Research Fellow, modelling neuronal networks</b>
2002–6	University of Groningen, The Netherlands: <b>PhD student, Human sleep models</b>
1998–9	Schmalhausen Institute of Zoology, Kiev, Ukraine: <b>aborted Cand. Sci. in entomology</b>

## Skills

- Erlang/OTP: general expertise, with deeper coverage of cluster architecture and distributed databases. rebar (2 and 3). (*actively since 2010*).
- Riak: architecture and codebase; GitHub-centered code organisation and workflow. (*actively in 2015–17*).
- 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*).
- 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*).
- GTK+: plain C and with Glade (*occasionally since 2008*).
- Emacs (*actively since 2004*).
- $\LaTeX$ , Octave, Gnuplot, Maxima, R (*regularly since 2004*).

## Projects

- **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,  $\tilde{70}$ k of in Erlang/OTP code. Also, a web audio recorder and streamer Elm+JS app, using webpack.
- **Aghermann**, (public repo on **github**) 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 **github**) a neuronal network simulator using NML for network description. Very precise but slow; with scripting capabilities in Lua. Packaged for Debian by me.