

CV as per
March 17, 2017



Andrei ZAVADA

General

Born 4 November, 1973 in Kharkov, USSR (now Ukraine)
Languages Russian (mother tongue), English, Ukrainian; French and Dutch (functional)
Married 2007, with two kids (2012, 2014)
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Degrees and Qualifications

2007 **PhD** in *Physiology* 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 *Entomology* from Kharkov State University, Ukraine.

Affiliations/Employers

November December 2014–April 2017 (a major contractor of) **Basho Inc**, remotely from Ukraine: **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**
2002–6 University of Groningen, The Netherlands: **PhD student**
1998–9 Schmalhausen Institute of Zoology, Kiev, Ukraine

Skills

- Erlang/OTP: general expertise, with deeper coverage of cluster architecture and distributed databases (*actively since 2010*).
- Riak: architecture; tools & apps; GitHub-centered code organisation and workflow (*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: actively since 2008*).
- Python: learn-as-you-go (*In use: actively since 2013*).
- GNU toolchain: autotools, make, gcc (*actively since 2008*). Valgrind, gdb (*occasionally since 2008*).
- git (also GitHub-specific 'extensions') (*actively since 2010*), subversion, CMake (*occasionally since 2013*).
- Jira, Redmine, Bugzilla (*regularly since 2010*).
- Packaging: Debian, OpenSUSE, Gentoo (own/primary dev system) (*regularly since 2011*).
- Linux administration (Debian, Gentoo) (*regularly since 2003*).
- PostgreSQL (*actively in 2013-2014*).
- GTK+: plain C and with Glade (*actively since 2008*).
- Emacs (*actively since 2004*).
- \LaTeX , Octave, Gnuplot, Maxima, R; GIMP, Inkscape (*regularly since 2004*).
- Functional JavaScript, HTML (*occasionally 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). 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 (mainly) in Erlang/OTP. This system is running on the Lomonosov HPC (other installations possibly exist).
- **Aghermann**, (public repo on **github**) a sleep-research experiment manager, with a facility for reading, displaying, and scoring EEG recordings in EDF format; power spectra analysis and visualization; and Process S simulation following Achermann et al, 1993. I am also packaging and maintaining it for Debian.
- **CNrun**, (public repo on **github**) a neuronal network simulator using NML for network description. Provides conductance- and rate-based Hodgkin–Huxley neuron models, and a number of other neurons & synapses. A 5-6-order RK method is used for integration. Very precise but slow; basic scripting capabilities. Packaged for Debian by me.