Software Developer – Oleg Shalaev

☎ 573-268-2108 Soleg@chalaev.com www.linkedin.com/in/chalaev/ github.com/chalaev

The most recent version of this document is available on chalaev.com/files/cv.pdf

Introduction

I have background in Physics (15 years) and programming (7 years).

Education

- M.S. in Physics with Distinction, St. Petersburg Technical University (Russia).
- Ph.D. in Physics at SISSA (Italy).

Philosophy

In my ideal world, the code is not finished until it is documented and automatic tests are supplied. The best way to create documentation is to use literate programming, and emacs org mode is probably the best for that because github displays .org files nicely formatted

I think that too often IT solutions are over-engineered, and for this reason are unreliable and have security issues. The idea behind most of my projects mentioned below was to create something much simpler (and thus more reliable) than the existing software.

Publicly available achievements

- DB. js a tiny MVVM framework, see db.leanws.com my replacement for React
- The Website Builder a modern wiki engine: builder.leanws.com and youtube.com/@leanwebsolutions1537
- Combined Hosting Service (for builder.leanws.com): info.leanws.com/hosting

Tools

- Ruby on Rails since 2022.
- Common LISP: (i) see github.com/chalaev and (ii) backend for the Website Builder and Combined Hosting Service (see above). Also on my current job I upgraded old LISP code generating LATEX catalogues of healthcare providers. Here are some github links to my publicly available lisp code:
 - I wrote github.com/chalaev/cl-simple-logger and use it in all my lisp projects because previously available loggers are over-engineered IMO.

- github.com/chalaev/cl-libconfig parses and updates configuration files in libconfig format. This code is an example of C libraries usage in Common Lisp.
- github.com/chalaev/cl-signal-handler allows to send messages to a LISP server by killing the recepient process. I wrote this because previously available github.com/death/dbus solution (depending on 55 other packages) is over-engineered.
- Emacs lisp: I am an advanced emacs user (using it since 2002). Published e-lisp code:
 - cloud.el to synchronize files (updates, renames and removals) between several computers. The draft (obsolete and semi-working) version of the code is available on github.com/chalaev/old-cloud
 - el-backup.el for incremental daily backups both (i) to another hard drive on my desktop and (ii) to the cloud (encrypted). This is my el-replacement for the backup2l bash script from Debian repositories.
- Beginner in Clojure: Since 2022, approximately 15% of my work is coding in Clojure.
- Literate programming: I used it for my LISP and JavaScript projects. I am also using it when I have to update undocumented code on my current job. Once you start using it, you never quit.
- Dynamic web-development: I used KnockoutJS in 2017-2020, later replaced it with my own code, see db.leanws.com and github.com/chalaev/DB.js
- **PostgreSQL:** Working with big tables containing info about numerous healthcare providers. Often I update long (150+ lines) SQL queries.
- GNU/Linux: I can configure a Debian server (nginx, exim4, dovecot, PostgreSQL, systemd).
- **SHELL:** For example, I occasionally update cron (bash) scripts downloading and processing data from government servers.
- **LATEX and TEX:** I used LATEX intensively during my Physics career, but even on my current job I occasionally use both LATEX and plain TEX.
- **Python** and **Perl**: I used Python to power back end of a web server, and I have tried Perl (see github.com/chalaev/wifi-switcher) when I was searching for the best computer language for my needs. I use neither Python nor Perl for 3 years.

Employment history

- 2022-now: software developer at United Healthcare.
- 02/2017-2022: founder and full stack developer at Lean Web Solutions www.leanws.com. 20 Office Park Way, Pittsford NY.
- 04/2013-11/2016: research scholar at the University of Rochester. 525 Computer Studies Bldg., P.O. BOX 270231, 14627-0231 Rochester NY.

- 08/2012-03/2013: research scholar at CSUN. Live Oak Hall, CSUN, 18111 Nordhoff Street, 91330 Northridge CA.
- 12/2008-08/2012: research scholar at the University of Missouri. 223 Physics Bldg., University of Missouri, 65211-7010 Columbia MO.

Natural languages

English (fluent), Russian (native), German (Goethe Institute B2 certificate), Italian (CILS C1 certificate).

Physics articles

For articles and citation indices, visit my Google Scholar profile: https://scholar.google.com/citations?user=9zdm3gEAAAJ