# Ștefan Talpalaru

Italy

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#### **Personal statement**

I am a software architect and developer with 14 years of experience – mostly in web related projects and Ethereum – and a system administrator focused on Linux.

Professionally, I gravitate around Python, Django, Javascript, Nim and Gentoo.

My open-source projects vary from the usual Django apps / <u>Python</u> wrapper for PCRE / <u>Go worker pool library</u> / etc. to the genuinely interesting <u>grafting of the gccgo runtime into Nim</u> in order to combine Go's goroutines, channels and GC with Nim's generics, macros and transpilation to C.

Then there's the occasional dip in unknown waters like the <u>porting to Linux of a C/C++ scanning tool made by Studio Ghibli</u>, including a new SANE front-end – of questionable practical use when xsane is available, but with some tracing tricks up its sleeve and needed to replicate the original workflow of the related OpenToonz project. I had no prior experience with SANE or FLTK, but that's the beauty of open-source – no artificial barriers to entry.

#### Skills

 Python – used mainly in web development, in conjunction with Django (and Cython for wrapping C libraries)

 Javascript – just client-side, we have nicer languages for wasting cycles on the server

- Go just enough to come to the conclusion that less is not more. More is more. Elegant CSP implementation, though.
- Nim a bit too much experience there. Debugging the compiler and runtime is fun at first, but eats up development time in the long run.
- Haskell just the core language besides satisfying my curiosity, I learned what a powerful type system can do for you (and that problems with tooling and packaging can become a deterrent for the whole ecosystem).
- Linux system administration when given a choice, I run Gentoo
  ~amd64 on a VPS provider like Linode. I maintain my own <u>package</u>
  <u>overlay</u> and like to control all the system's software with the
  distribution's package manager.
- Git besides the typical usage, I do continuous integration and deployment using git hooks – one in the test repo to run a fast test suite and if that passes, the code is pushed to the production repo where another hook runs the necessary deployment commands. I also do crazy stuff with submodules to mimic a monorepo.
- uWSGI in a quest to get the perfect graceful reload for Python web backends, I got the chance to dig into this project's complex functionality and came up with the prize - I figured out <u>a setup</u> that allows me to not lose a single request while the workers are reloaded.

## **Work history**

#### Nim Developer at Status.im

(November 26, 2018 - March 31, 2022)

Remote contract for developing open-source Nim software.

#### **Duties**

- software development for Nimbus (an efficient Ethereum client) and associated libraries
- automating releases (with reproducible builds) and CI testing
- cross-platform support, optimisation, debugging, benchmarking, etc.

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# Sole software developer and system administrator for senatus.net

(January 2014 - Present)

After the demise of our small consulting company, I took over the maintenance and development of <u>senatus.net</u> – a complex social network / magazine / photo and video hosting site built with Django, PostgreSQL, Redis, Nginx, uWSGI, Varnish, Celery, Amazon S3 and CloudFront.

#### **Duties**

everything on the technical side

#### CTO, Partner - Odeon Consulting Group Pte Ltd

(May 2008 - December 2013)

A small consulting firm, a huge learning opportunity. Our biggest projects were <u>senatus.net</u>, and <u>BAMS2</u> – a neuroinformatics project focused on brain connectivity data. As a result of working on the latter, which was mostly my baby, I ended up as the second author of a <u>scientific article</u>. I still brag about it.

#### **Duties**

- software architecture and development
- system administration
- providing technical guidance for a small team

#### Education

Victor Babeş University of Medicine and Pharmacy, Timişoara, Romania

(1999 – 2005)

Doctor of Medicine (MD)

#### **Talks**

EuroPython 2011 - "django-rdflib and PostgreSQL - the best of both worlds" - actually 2 talks on the same subject, one in English and the other in Italian

EuroPython 2012 - "Turning regular expressions up to eleven" - a lightning-talk about morelia-pcre, my Python PCRE wrapper

### **Other**

I am a Romanian citizen.

I am fluent in English and Italian, a bit rusty in French.

LinkedIn profile

GitHub account

GitHub pull requests

A selection of open-source projects and contributions