Richard Marko

Personal

Citizenship:	Slovak
Contact address:	Soukopova 546/13, 602 00 Brno, Czech Republic
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GitHub:	https://github.com/sorki/
GitLab:	https://gitlab.com/sorki/

Education

Masaryk University, Brno, Czech Republic, Since 2008

Mathematical Computer Science, Faculty of Informatics

- Bachelor's Degree Programme
- Graduation date: June 2011
- Thesis topic: *Application testing using fuzzers*
  Description of fuzz testing methods and tools. Software product (dfuzz [1]) designed for automated Linux daemon testing is a part of the thesis.

Grammar School of Ľ. Štúr, Zvolen, Slovakia,

Graduation Exam, June 2008

Professional Experience

Astronomical Institute of Czech Academy of Science,

Software engineer, web developer **2008-2011**

- Development of conference organization software – web-based solution written in Python (Django)
- Data analysis and processing
- Software solution for Sudden Ionospheric Detector (SID) Network

Conference organization

Part of local organizing committee (LOC)

- AXRO Conference, Prague [2] (2009, 2010)
- IBWS Workshop, Karlovy Vary (2009, 2010, 2011)

Red Hat, Inc.,

Associate Software engineer, administrator **2011-2016**

- ABRT (Automated Bug Reporting Tool) Project [3]
- COPR Project [4]

vpsFree, z. s.,

Administrator, software engineer **2016-2019**

- vpsAdminOS project [5]
- Transition to Nix ecosystem

Self-employed

Software engineer **2006-now**

- Open-source embedded software & hardware development
- Consulting
- Web development (number of commercial sites)

Volunteer

Fedora Project

- Contributor

Otevřená města, z. s.

- Infrastructure
- Consulting

NixOS Project

- Contributor

Projects

dfuzz, *Python, 2011* [1]
Daemon configuration fuzzer (part of my bachelor thesis). Basically file fuzzer – wrapper over few open-source fuzzers, valgrind and GDB.

sidc, *C, 2010* [6]
Maintenance of sudden ionospheric disturbance collector (sidc). Number of improvements and bug-fixes.

sidc-gui, *Python, 2010* [7]
Graphical user interface for **sidc**. Live plotting of collected data using matplotlib and wxWidgets.

DistRap, *Haskell, 2017* [8]
Development of distributed control systems for robotics.

Computer skills

Programming languages
Preference for functional programming languages (mainly Haskell). Interested in typed functional programming theory and proof assisted develepoment.
Configuration management languages - Nix, Dhall, previous experience with Ansible, Salt.
Fluent in common imperative languages (Python, C, C++, Java, PHP). Lots of experience with web development.

Operating systems

Linux	strong administration skills
Windows	basic administration, MCP certificate

Language Skills

English	fluent
Czech	fluent
Slovak	native speaker

Miscellaneous

Driving license category B

Personal qualities

Self-learner, flexible, team player, able to meet deadlines.

Hobbies

All kinds of sports, astronomy, music, security, social engineering.

* References

[1] Daemon configuration fuzzer. https://github.com/sorki/dfuzz.

[2] Astronomical X-Ray optics conference. http://axro.cz.

[3] Automatic bug reporting tool. https://github.com/abrt.

[4] Community projects - copr build service. https://pagure.io/copr/copr.

[5] vpsadminos. https://github.com/vpsfreecz/vpsadminos.

[6] Sudden ionospheric disturbance collector. https://github.com/sorki/sidc.

[7] Sidc gui. https://github.com/sorki/sidc-gui.

[8] Distributed rapid prototyping. https://github.com/distrap/.