

Curriculum vitae

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April 13, 2018

Latest version: <http://www.stefansperling.de/stefan-sperling-cv.pdf>

Professional Focus

- Open Source developer and consultant
- Software development process consulting and tool support
- Workshops and trainings for developers and end users

Projects

- Osmocom developer (2018 to present, ssperling@sysmocom.de, www.osmocom.org/ / www.sysmocom.de)
 - Development of fixes for various bugs filed in Osmocom's issue tracker
 - Development of automated GSM protocol tests with Eclipse Titan TTCN-3
 - Implemented a feature which prevents overload if too many phones attempt to connect concurrently when a GSM base station starts up
 - Review of other code contributions to Osmocom
- OpenBSD support (2015 to present)
 - Implementation and maintenance of a high-availability firewall setup spanning two office locations in Berlin, based on OpenBSD with pf, carp, and IPsec
 - Support of design, implementation, and maintenance of a dozen+ firewall setup spanning two data centres in Luxembourg, based on OpenBSD with pf, carp, and IPsec
 - Hands-on workshop with 60 pages worth of written training materials for administrators of above setup
- OpenBSD developer (2008 to present, stsp@openbsd.org, www.openbsd.org)
 - Improved 'ospf6d' implementation of OSPF3 IPv6 routing protocol
 - Added UTF-8 support and POSIX locale enhancements
 - General network stack improvements, especially in IPv6 and wireless
 - Added and improved drivers for touchpads, card readers, ethernet and wifi devices
 - Improved software RAID boot support
 - Added 802.11n support to wireless subsystem and wireless drivers
 - Implemented 802.11n-capable transmit rate control algorithm
 - Added support for roaming between access points to drivers for Intel wifi devices
 - Switched Atheros USB wifi device driver to an open source firmware implementation
 - Porting of third party applications, including Apache Subversion
 - Participation in and organization of developer meetings
 - Recurring speaker at the yearly EuroBSDcon conference
- Apache Subversion developer (2007 to present, stsp@apache.org / stsp@elego.de)

- Co-designed and co-implemented tree conflict detection for Subversion
- Improved Subversion’s authentication credentials cache
- Continuous review and audit of Subversion code base
- Implemented parts of Subversion’s next-generation working copy library
- Designed and implemented parts of Subversion’s move-tracking support
- Added ‘svn patch’ command for applying unidiff patch files
- Improved Subversion’s merge conflict resolver
- Managed Subversion releases
- Served as Google Summer of Code mentor several times
- Reviewed and committed contributed patches, fixed user-reported issues
- Participation in and organization of developer meetings
- Serving as Apache Subversion Project Management Committee Chair (2017 to present)
- Member of the Apache Software Foundation
- Consulting services around Apache Subversion (2008 to present, with www.elego.de)
 - In-depth workshops and trainings for Subversion users and administrators
 - Advice on advanced branching/merging strategies
 - Migration to Apache Subversion from other version control systems
 - Hands- on troubleshooting support for users and administrators
 - On-site diagnosis and fix of client- and server-side bugs
 - Repaired several instances of severe repository corruption
 - Communication of customer requirements to Subversion’s developer community

Employment

- 2004 – 2014 Developer and consultant at elego Software Solutions GmbH, Berlin, Germany
- Self-employed since 2015.

Education

- 2008 – 2009 MSc Software Development for Computer Networks, University College Cork (UCC), Ireland
- 2004 – 2008 BSc Computer Science, Free University of Berlin, Germany
- 2003 – 2004 Computer Science, Technical University of Berlin, Germany
- 2000 – 2003 German Abitur, Anna Freud Oberschule, Berlin, Germany
- 1999 – 2000 Leaving Certificate, Ashton School, Cork, Ireland

Skills

Formal Languages	C, C++, Java, Python, Perl, bourne shell, m4 (autoconf), make, SQL, Forth, TTCN3, \LaTeX
Natural Languages	German (mother tongue), English (near native), French (intermediate)
Version Control	Apache Subversion, Git, Mercurial, Fossil, CVS
Operating systems	Linux (any variant), BSD (any variant)
Web	HTTP, HTML, CSS, JavaScript, PHP, WebDAV, XML
Networking	DHCP, DNS, OSPF, OLSR, BGP, IPv4, IPv6, pf (BSD packet filter), iptables (Linux packet filter), IPsec, OpenVPN, 802.11, OpenWRT
Databases	PostgreSQL, SQLite