Lucía Andrea Illanes Albornoz

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GitHub	Website		
https://git.io/vS4CG	https://www.luciaillanes.de/		

Software development

Programming areas	Systems & network programming on Linux, *BSD & Windows
Languages and tools	C, Tcl, BSD & GNU development environments, gdb, Qemu; amd/x86 & MIPS assembler, C++, Lua, Python & WinDbg: some experience

Systems engineering & system administration

Platforms and servers	Debian/-derived Linux, Free/Net/OpenBSD, ircd-hybrid, nginx
Scripting and automation	Ansible, Bourne/Bash/Z shell, BSD rc, systemd, Perl, rsync
Roles and technologies	iptables & pf-based firewalls, IPsec & OpenVPN, LXC & cgroups, ZFS

Project involvement

Feb. 2016-2024	**midipix_build: build/cross-compilation infrastructure for midipix, a POSIX/Linux-compatible development/runtime environment for Windows**

1. Automatically cross-builds ca. 450 packages: the toolchains, runtime components & 3rd party software.
2. Supports dependency resolving, file installation DSL, parallelisation, and RPM package building.
3. Written in reasonably portable Bourne shell, ca. 6700 SLOC, pragmatically lightweight & modular.
4. Fast implementation avoiding fork-exec-write/read patterns as much as possible.

Nov. 2016-Dec. 2016	**Tcl TIP #458: design and implementation of epoll/kqueue support in the Tcl notifier on Linux/*BSD, resp. for Tcl, a high-level, general-purpose, interpreted, dynamic programming language (FlightAware bounty programme)**

1. Tcl's original event-based architecture based on select(2) had scalability and code complexity concerns.
2. On Linux/*BSD, epoll/kqueue is now used instead, which eliminates a major bottleneck in event-heavy code.
3. Code complexity was reduced as the code is no longer unnecessarily multi-threaded, without breaking multi-threaded Tcl or C code.

Languages (internally assessed unless otherwise noted)

Paternal language	Spanish (CEFR: C1)
Maternal language	German (CEFR: C1)
1st foreign language	English (CEFR: C1; at Colón Language Center Hamburg: A)
Classical language	Classical Arabic

Educational career and life abroad

2014-Jan. 2017	Hamburg: in pursuit of secondary education Deutsche Angestelltenakademie: MSA **(equiv. to GCSE in the UK)**
2013	Northwestern Spain: Way of St. James
2011	Viña del Mar, Chile: freelancing IT jobs
2005-2008	Valparaíso & Santiago, Chile Studied Arabic & Spanish languages and cultures
2003	**Sasol Germany, Hamburg (Internship)** Internal help desk/support on Windows platforms
2002	**Compaq Computer Corporation, Hamburg (Internship)** Corporate customer support on OpenVMS platforms
2001-2004	Integrierte Gesamtschule Walddörfer, Hamburg