

Lucas Meneghel

Senior Engineer • OS & Cloud Automation • CI/CD Systems • Open-Source
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Profile

Senior engineer with 20+ years designing automation infrastructure for Linux, kernel, hypervisor, and cloud platforms. Led CI/CD programmes at AWS, Red Hat, ScyllaDB and ZEDEDATA; former founder, maintainer and contributor to widely-used open-source testing frameworks and suites (avocado, avocado-virt-tests, scylla-cluster-tests). Comfortable operating at the intersection of systems engineering, large-scale distributed testing, and cross-team technical leadership.

Professional Experience

Dec 2022 – Present **Amazon Web Services (AWS)** — *Lead of Automation & CI — Amazon Linux*

Senior Software Development Engineer

- Architected a CI/CD system for Amazon Linux allowing for build and orchestration at various points of the OS lifecycle.
- Designed a large-scale test-automation framework that orchestrates OS-level functional, regression and integration tests at fleet scale.
- Established engineering standards for CI adopted across the Amazon Linux org.

Mar 2022 – Nov 2022 **ZEDEDA Inc.** — *Lead of Automation — EVE OS*

Senior Software Engineer

- Led automation and CI for the EVE OS edge-orchestration platform.
- Worked to upstream zededa orchestrator tests at [lf-edge](#).

Sep 2017 – Feb 2022 **Amazon Web Services (AWS)** — *Lead of Automation — EC2 KaOS (Kernel & OS)*

Senior Software Development Engineer

- Built scalable automated testing tools for kernel, hypervisor and EC2 platform code, supporting continuous delivery across multiple kernel generations.
- Developed internal tooling that measurably improved engineer productivity and reduced pre-release validation cycle times.
- Partnered with kernel and hypervisor teams to integrate testing earlier in the development cycle.

Jan 2017 – Aug 2017 **ProfitBricks GmbH (1&1 IONOS)** — *Automation and Internal Tools*

Senior Python Developer

- Maintained internal test-automation systems for QEMU and Linux kernel modules.
- Contributed reviews to the avocado and virt-test open-source projects.

Oct 2015 – Dec 2016 **ScyllaDB** — *Automation, CI and Internal Tools*

Senior Software Engineer

- Created the continuous-integration system for ScyllaDB's entire code base from scratch.
- Authored the [scylla-cluster-tests](#) framework, a tool for ScyllaDB performance and failure injection testing.

May 2009 – Oct 2015 **Red Hat** — *Test Automation — Virtualization Team*

Software Engineer/Senior Software Engineer

- Core maintainer of the **autotest** framework and lead developer of the **avocado** testing framework ([avocado-framework](#)), which became the standard testing toolkit across Red Hat's kernel and virtualization teams.
- Accumulated 2,400+ commits to open-source projects over six years.
- Represented Red Hat as a speaker at LinuxCon, KVM Forum and Devconf (see Talks below).

Apr 2007 – Apr 2009 **Linux Technology Center — IBM** — *Linux on Power (LoP) Test Team*

Software Engineer

- Became maintainer of the stable branch of the **autotest** framework.

- Ported legacy kernel tests to autotest and developed project-management plugins for Trac.

May 2005 – Apr 2007 IBM – Sprint Project – Production Support
IT Analyst

- Implemented a wiki-based documentation system (MoinMoin) adopted org-wide.
 - Built a process-optimisation web tool in Python, reducing manual reporting overhead.
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Education

2003 – B.Sc. Chemical Engineering, State University of Campinas (Unicamp), Brazil
Transitioned to software engineering in 2005.

Skills

Automation & CI/CD: pipeline design, test-grid orchestration, large-scale fleet testing

Programming (expert): Python, Typescript

Cloud: AWS (EC2, IAM, S3, CDK), GCP, Azure (infrastructure-as-code)

Web Frameworks: React

Linux & Kernel: OS internals, kernel/hypervisor testing, package management

Programming (proficient): Golang

Containers & Virtualisation: KVM, QEMU, libvirt, Docker

Collaboration: distributed teams, open-source governance, technical mentoring

Open-Source

- [avocado-framework](#) – Co-creator and long-time maintainer; Red Hat’s standard virt test toolkit.
 - [scylla-cluster-tests](#) – Author; ScyllaDB’s chaos-engineering and performance test suite.
 - [autotest](#) – Maintainer; used back in the day (late 2000s and early 2010s) for Kernel Testing.
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Presentations & Talks

2016 – 2nd Community Chaos Day (Seattle) – “Scylla-Cluster-Tests & Chaos Engineering”

2015 – LinuxCon North America (Seattle) – “Avocado: Open Source Testing Made Easy”

2015 – Devconf (Brno) – “Avocado: Next Generation Testing Toolbox” – [video](#)

2013 – KVM Forum (Edinburgh) – “Autotest and virt-test: What changed in a year”

2012 – LinuxCon Europe (Barcelona) – “Assembling a kernel test grid with autotest”

2011 – LinuxCon North America (Vancouver) – “Autotest: The kernel testing framework”

2011 – KVM Forum (Vancouver) – “Making KVM autotest useful for KVM developers” – [video](#)