Alexandre Kandalintsev

London, UK ⊠ exe.sre@gmail.com uk.linkedin.com/in/exesre github.com/kopchik



Work Experience

Jul 2014 - Site Reliability Engineer, Google, London, UK.

Jan 2015 Support of AdWords/Double-click backends. Some highlights:

- Developed team-wide Service Level Objectives (SLO)
 - Defined objectives for supported projects
 - Created general guidelines for new projects
 - Designed and implemented SLO dashboard (Python and JS/JQuery/NVD3)
- \circ Implemented script that exported job parameters to team dashboard (Python)
 - Queried database for running and recently terminated job
 - Parsed config files for periodic ("cron") jobs
 - Performed sanity checks: permission problems, duplicate jobs and other checks
- Maintained high SLO
 - Configured monitoring and alerting systems
 - Resolved production issues
- General duties:
 - Standardization and unification of production configuration
 - Review of proposed system designs
 - Performance analysis
 - System tunning

May 2013 - Internship, University of Luxembourg, Luxembourg, http://uni.lu/snt.

October • Studied and proposed solutions to reduce the performance interference between VMs

2014 • The obtained results were submitted as a conference paper

Sep 2010 - Internship, University of Trento, Italy, http://www.napa-wine.eu/.

Nov 2010 NAPA-WINE is a peer-to-peer media streaming platform. My contribution is:

- Support for multi-channel media streams
- New GUI frontend

Nov 2007 - Senior Unix Administrator, Agava Company, Moscow, Russia.

- Jul 2010 Managed a team of four system administrators
 - Solved the most complicated technical problems
 - Consulted VIP-clients and provided them with personal support
 - Gave trainings and seminars for system administrators on the following topics:
 - Apache web server course
 - Understanding Nginx and "10k clients" problem
 - Using tcpdump to watch traffic
 - DDoS defense methods
 - Basic database optimizing
 - Right backup strategies

Oct 2005 – Unix Administrator, Agava company, Moscow, Russia.

Nov 2007 Duties: Standard requirements and duties of system administrator.

Feb 2005 – Junior Unix Administrator, Agava Company, Moscow, Russia.

Oct 2005 *Duties:* Providing the first line full time technical support. Assembling, installing and maintaining equipment in data centers.

Education

2010 – now PhD candidate, Telecommunications, University of Trento, Trento, Italy.

2006 – 2010 **MSc**, Computer Science, University of Russian Academy of Education, Moscow, Russia.

2003 – 2005 **BSs (3 semesters)**, Computer Systems and Networks, Bauman Moscow State Technical University, Moscow, Russia.

Selected Personal Projects

Qemu named interfaces: Assign meaningful names to tap interfaces: https://github.com/kopchik/patches/blob/master/qemu_ifname.patch

Virtual Machine Commander: a tool to orchestrate multiple virtual machines at once: github.com/kopchik/vmc

Parallel Downloader: downloads chunks in order so video files can be viewed before they completely downloaded: github.com/kopchik/pdl

IPv4/IPv6 proxy: enables IPv6 for legacy applications: github.com/kopchik/proxy64

Publications

A. Kandalintsev and R. Lo Cigno. A Behavioral First Order CPU Performance Model for Clouds' Management. In *Proc. of ICUMT*, October 3–5 2012.

A. Kandalintsev, R. Lo Cigno, and D. Kliazovich. Profiling Cloud Applications with Hardware Performance Counters. In *Proc. of ICOIN 2014*, 2014.

A. Kandalintsev, R. Lo Cigno, and D. Kliazovich. On-the-fly application profiling for better performance isolation (work-in-progress). 2015.

Skills

OS Linux, FreeBSD

Programming Advanced: Python

Intermediate: shell scripting

Basic skills: SQL, Java, JavaScript/LiveScript, C, C++

Tools Valgrind, GDB, Qemu/KVM, perf, OProfile, OpenVpn, VCS and other tools

Languages

English fluent (C1)

Russian native

Hobbies

DIY electronics (microcontrollers, robot platforms and interaction with the real world)