Christoph Champ

Online CV: http://www.christophchamp.com/cv/
Email: christoph.champ@gmail.com (*best* way to reach me)
Current location: Seattle, WA

Profile

Senior Cloud Engineer, Senior DevOps Engineer, Linux System Administrator, and Python programmer with strong technical and analytical skills. Experienced in the areas of Cloud Computing, system administration, virtualization, relational databases, web design (LAMP), programming, and scientific research. Interested in DevOps, automation, Big Data, machine learning, cloud computing, and open source software development.

(see: http://xtof.ch/cv for an extended CV.)

Education

B.S. Biochemistry and Biophysics, Oregon State University (September 2000 - June 2004)
Red Hat Certified System Administrator (RHEL 6, Certificate #140-074-097)
AWS Certified Developer - Associate (Certificate #AWS-ADEV-3367)
AWS Certified Solutions Architect - Associate (Certificate #AWS-ASA-35064)

Skills

Computer operating systems: Linux (CentOS, Ubuntu, openSUSE, Mandriva, etc.), Mac OS X
Technologies: AWS, GCP, Ansible, Terraform, Kubernetes, Docker, Rancher, Istio, Xen, XenServer, OpenStack, KVM, GitHub, GitLab
Computer languages and scripts: Python, C (+MPI/MPICH), Perl (+CGI), PHP, (X)HTML, CSS, SQL, various shell scripting languages (bash, awk, sed, etc.), git, RESTful APIs
Languages Spoken: English, German (college level), and Spanish (college level).
Note: I do *not* have any experience in Microsoft Windows.

(see: http://xtof.ch/skills for a detailed listing.)

Experience

Redapt, Seattle, WA, USA – July 2018 to present
Senior Cloud Engineer
Job description: Helping clients move to the Cloud or make better use of the Cloud and/or on-premises.
Skills used: Linux, GCP, AWS, Kubernetes, Docker, Rancher, Istio, Ansible, Terraform, Vagrant, etc.

Redapt, Seattle, WA, USA – September 2015 to July 2018
Cloud Engineer
Job description: Helping clients move to the Cloud or make better use of the Cloud.
Skills used: Linux, AWS, Docker, Rancher, Kubernetes, Ansible, Terraform, Vagrant, OpenStack, KVM, etc.

Trusted Builders, Seattle, WA, USA – February 2015 to August 2015
Linux Administrator / Web Developer (remote work)
Job description: Moving entire infrastructure to the Cloud, providing site reliability, monitoring, etc.
Skills used: Linux, Apache, MySQL, Python, Rackspace Cloud, Vagrant, Ansible

Rackspace, USA – May 2013 to January 2015
Linux Administrator II
Job description: Providing Cloud Support (servers, storage, databases), administering Xen, XenServer, OpenStack, KVM, networking, site reliability, maintenance, LAMP-stacks, etc.
Skills used: Linux, Apache, MySQL, PHP, Rackspace Cloud, Xen/XenServer, KVM

MadLab, Seattle, WA, USA – December 2012 to April 2013
Cloud and Web Developer
Job description: Built a RESTful web framework and API using Amazon Web Services' NoSQL DynamoDB and a custom-built/in-house MVC in PHP.
Skills used: Linux, Apache, MySQL, PHP, Amazon Web Services

Dr. Elhanan Borenstein Laboratory, University of Washington, USA – August 2012 to November 2012
Scientific Programmer / Research Assistant
Job description: Conducted scientific research on the collection and organization of metagenomic datasets (a 435 TB dataset) and the assembly of an analysis pipeline for metagenomic data. Also performed analysis of the gut microbiome of children with cystic fibrosis (CF) and on methods to identify genetically enriched functions.
Skills used: Linux, Python (+Pandas), R

Consultant, Seattle, WA, USA – October 2010 to June 2012
Cloud and Web Developer
Job description: Built a customer relationship management (CRM) website using Django (+Python, MySQL) with extended web services, command line interface, mobile apps, etc.
Skills used: Linux, AWS, Apache, MySQL, Python (+Django)

Dr. Ethan A. Merritt Laboratory, University of Washington, USA – October 2006 to October 2010
Linux System Administrator / Research Assistant (+software developer / maintainer)
Job description: Developed and maintained the Python Macromolecular Library (pymmlib) package and developed and maintained the TLS Motion Determination (TLSMD) webserver/webservices. Contributed code to the CCP4 suite. Performed detailed analysis of thousands of crystallographic structures (both in-house and from the PDB). Programmed in C, Fortran, Python, Perl, JavaScript, Bash, etc., maintained multiple MySQL databases, and worked in a LAMP environment for web services. Also was the Linux System Administrator for all computers in our lab, performed backups (tape, DVD, xHDDs, etc.), networking / firewall, hardware and software support for all personnel, etc.
Skills used: Linux, Apache, MySQL, Python, Perl, C, Fortran

Dr. Carlos J. Camacho Laboratory, University of Pittsburgh, USA – March 2006 to June 2006
Linux System Administrator / Research Assistant (+software developer / maintainer)
Job description: Developed an algorithm with a web services front-end to provide a quick estimate for protein-protein interactions and associated energies. Programmed in C, Fortran77, PHP, and done in a LAMP environment.
Skills used: Linux, Apache, MySQL, Perl, C, Fortran

Dr. David W. Ussery Laboratory, Danmarks Tekniske Universitet, Denmark – August 2005 to November 2005
Research Assistant (and programmer)
Job description: Helped develop and maintain algorithms and web services for a Comparative Genomics department. Programmed in C, Perl, Python, Java, Bash, etc., maintained multiple MySQL databases, and worked in a LAMP environment. Also was a Teaching Assistant for a Comparative Genomics class.
Skills used: Linux, Apache, MySQL, Perl, Python, C

Dr. Carlos J. Camacho Laboratory, University of Pittsburgh, USA – October 2004 to July 2005
Linux System Administrator / Research Assistant (+programmer)
Job description: Modeled protein-protein and protein-DNA interactions from crystallographic data obtained via the PDB. Developed and maintained 4 websites to provide access to the algorithms we developed as web services (all done in a LAMP environment). Programmed in C, Fortran77, Perl, PHP, and maintained multiple MySQL databases.
Skills used: Linux, Apache, MySQL, Perl, C, Fortran

Dr. Alex Rich Laboratory, Massachusetts Institute of Technology, USA – July 2002 to December 2002
Research Assistant (+programmer)
Job description: Did research on the function of Z-DNA in various genomes and developed algorithms in C to search through genomes and compare the results against microarray data. Also wrote Perl scripts and maintained a MySQL database.
Skills used: Linux, MySQL, Perl, C

Dr. P. Shing Ho Laboratory, Oregon State University, USA – May 2000 to September 2004
Research Assistant (+software developer / maintainer)
Job description: Did research on the function of Z-DNA in various genomes (resulted in a paper published; see CV).

Other duties consisted of being an assistant scientific programmer in C and Perl, as well as maintaining a MySQL database.
Skills used: Linux, Apache, MySQL, Perl, C