

Summary

Resourceful, research-oriented computer scientist/IT professional focused on continuous, proactive improvement of workflow and infrastructure, using automation and monitoring for measurable results. Fast and autonomous learner, capable of translating domain-specific problems into abstract models, finding applicable solutions, and communicating these to technical and non-technical users.

Areas of Expertise

- Linux/Unix systems installation, migration, system integration, daily operation, performance analysis
- Research-oriented computing (biomedicine/bioinformatics, language/teaching)
- e-Commerce and Social Media systems & applications
- Web and database applications (including CRM and CMS systems)
- Infrastructure services (DNS, DHCP, file servers, mail servers, firewalls, backup, virtualization)
- High-availability systems, failover, database replication, mass e-mail

Experience

Senior System Administrator Virtualization, 1&1 Internet AG

since October 2013

(IT Operations E-Business Hosting)

- system integration of multiple third party software solutions into 1&1 infrastructure
- specialist for optimizing deployment of applications in virtualized environments
- define and automate workflows for installation, deployment, and maintenance
- document installations, changes, and procedures

Achievements

- migration of servers & services to new versions of Debian & Puppet
- “100+ Free Apps” launched April 2016 with integrated Installatron environment
- analysis of server-side performance in preparation for migrating live systems to virtual environment
- setup of ELK-based centralized logging environment for E-Business applications
- “ListLocal” migrated to all-virtual environment
- “Newsletter Tool 2” relaunched May 2015
- “ListLocal” launched October 2014 in cooperation with Uberall GmbH
- “1&1 E-Shops” launched February 2014 in cooperation with ePages GmbH
- migrated ~1,000 servers to in-house LDAP-based user management system

System Administrator, hmmh multimediahaus AG

December 2006–September 2013

(formerly NEW VOICE GmbH, merged in August 2008)

- specialist for migrating customer sites and systems to Open Source Software solutions
- use OSS solutions efficiently to meet customers’ needs
- uncover and fix problems proactively to minimize harm to customer sites and systems
- continuously improve deployments through monitoring, updating, and upgrading to new technologies to meet changing demands
- communicate with developers, service and project managers to efficiently and successfully interact with customers
- document installations and changes, train colleagues and junior staff to handle existing and new installations

Achievements

- set up and maintained infrastructure for newsletter generation and delivery system serving over 20 customers with over 1M messages each week
- developed standards for internal and production systems to streamline operations, automated common workflows through scripts (create new customer web sites, set up mailboxes for newsletter system), and enhanced default configurations for new servers and virtual machines (reducing setup time from >2 hours to <15 minutes)

Research Assistant, Dartmouth College

January 1998–September 2005

(Prof. Makedon/DEVLAB, Department of Computer Science, Ph.D. program)

- set up and maintained computer laboratory infrastructure
- assisted in research of multimedia topics, e-commerce, internet security, medical data analysis

Achievements

- proof-of-concept website for consulting company to replace expensive localized training sessions with online training tools
- provided systems resources for graduate and undergraduate students and their research

Developer, Dartmouth Medical School

September 2000–September 2002

(Department of Biostatistics & Epidemiology)

- webmaster for Biostatistics group
- designed, deployed and improved web technologies for statistical data collection

Achievements

- replaced error-prone, FTP-based collection system with website for uploading statistical medical data
- designed user interfaces and workflows

Education

Master of Science/Computer Science, Dartmouth College June 2006

Diplom-Mathematiker/Informatik (MS/Computer Science), August 1997
Westfälische Wilhelms-Universität Münster

Bachelor of Arts/Computer Science, Dartmouth College June 1992

Qualifications

Platforms: Unix (various), Linux (Debian, Ubuntu, Red Hat, CentOS), Macintosh (Client, Server)

Services: Apache/nginx, MySQL, Tomcat, Postfix, Redis, Elasticsearch, Logstash; also: PostgreSQL

Tools: Icinga/Nagios/Cacti/MRTG/Zabbix, VMware (ESX/ESXi, vSphere), KVM, Puppet

Languages: C, PHP, bash shell scripting, SQL, HTML/CSS; also: C++, Python, R

Ticketing Systems: JIRA, Confluence

Certifications: LPIC-1, ITIL v2 Foundation

Courses: Puppet Fundamentals (Puppet Labs)

Languages: German (native), English (>35 years), French (3 years)

Citizenship: German

Availability: 3 months after end of current month