# Martin Bruchanov

SENIOR GNU/LINUX DEVELOPER AND DEVOPS ENGINEER

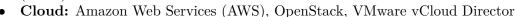
Current address: Halifax, Nova Scotia
<pre>Home page: http://bruxy.regnet.cz/</pre>
Email: bruchy@gmail.com
Linkedin: http://www.linkedin.com/in/bruxy
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# **Highlights of Qualifications**

- Over 15 years experience in Linux and UNIX system development and administration for critical environments.
- Linux user-space programming and POSIX interface knowledge.
- Experienced Agile development team member.
- Over 10 years experience in multicultural and distributed teams.
- Organized and detail-oriented; with strong analytical skills.
- Energetic team worker with good communication skills.

# Areas of Expertise Include

- **Programming languages:** GCC chain, ANSI C/C99, C++ (intermediate)
- Scripting languages: shell-scripting, bash, Python, perl, PHP, JavaScript, Ruby, sed, AWK
- GNU/Linux and Unix administration: CentOS/RHEL 5/6/7, Fedora, Ubuntu, HP-UX, Darwin



- Configuration Managment: Salt-stack, Chef + AWS OpsWorks, Vagrant
- Virtualization and container services: VMware, VirtualBox, Docker, HPVM
- Security: SELinux, Metasploit, TrueCrypt; HIPPA, PCI compliance
- Database services: PostgreSQL, MySQL, MongoDB, Oracle
- Build tools: Maven, Jenkins, Makefile, cmake, RPM/rpmbuild
- Version control: git, Perforce, CVS, github, Bitbucket, JIRA
- Monitoring tools: collectd + InfluxDB + Grafana, logstash + ElasticSearch, Datadog, PaperTrail
- Network administration: routing, iptables/firewalld, SSH, Apache, Nginx, Tomcat, DNS, FTP, CIFS, NFS, Squid, OpenVPN
- Network monitoring and troubleshooting: tcpdump, nmap, netcat, WireShark
- Graphics and typesetting: GIMP, Inkscape, ConTFXt, IATFX, MetaPost, MetaFun
- Web frontend: HTML5, CSS3, PHP, JavaScript (basic)
- Data representation and APIs: XML, JSON, YAML; REST, SOAP

# Professional Experience

### Analyze Re Inc. – Halifax, Nova Scotia

TECHNICAL OPERATIONS ENGINEER

- Administration of computational environment in AWS.
- Automation tools development with bash, Python and Ruby.
- Container virtualization with Docker and Docker Swarm.
- Configuration management with Salt-stack and Jinja2 templates.
- Continuous deployment and monitoring of fault-tolerant and distributed systems. Using tools such as Papertrail, PagerDuty, Datadog, etc.
- Managing and maintaining customer-specific deployment configuration.

# 2TheTeam LLC – New York, USA (remote contract)

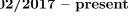
CLOUD SOLUTION ARCHITECT

02/2017 - present

03/2017 - present

🔼 Analyze Re





- Creation of AWS infrastructure for web-based application: load balancing and support for continuous deployment.
- Configuration management with OpsWorks, Chef and Ruby, Python automation tools.
- Implementation of monitoring and log consolidation with CloudWatch.
- Infrastructure and Linux operating system security and hardening.



10/2015 - 03/2017

**ATHLETIGEN** 

# Athletigen Technologies Inc. – Halifax, Nova Scotia

DEVOPS ENGINEER

Administration of Amazon Web Services (AWS) cloud environment.

- AWS utilities development with bash, Ruby and Python (with boto3 API).
- HIPPA compliant environment, security management and auditing with Security Monkey.
- Site reliability engineering for Athletigen web; Tomcat, Apache, Nginx troubleshooting.
- Container virtualization with Docker.
- Management of OpsWorks configuration with Chef recipes and ruby.
- Metric collection with collectd, InfluxDB and Grafana or CloudWatch.
- Network environment and OpenVPN configuration and administration.

# ZOOM International – Prague, Czech Republic

GNU/LINUX SYSTEMS ENGINEER

• Programmed system utilities in Bourne-Again Shell (bash) and Python.

Owner of GNU/Linux (CentOS, RHEL) architecture, product integration and develop-



10/2008 - 10/2012

11/2012 - 09/2015

- Administered PostgreSQL database and its integration.
- Supervised code base, maven building and advanced RPM packaging.
- Facilitated training materials and sessions for ZOOM employees on Linux troubleshooting, bash programming and regular expressions usage (in English).
- Created technical documentation in English.

# HEWLETT-PACKARD - Prague, Czech Republic

ITO SERVICE DELIVERY CONSULTANT

Administered and integrated HP-UX and GNU/Linux for mission critical environments and disaster recovery as Tier 3 support  $(24 \times 7)$ .

- Developed system automation utilities in POSIX shell, awk and perl.
- Implemented virtualized architecture with HP Integrity Virtual Machines.
- Configured critical high-availability environments based on MC/ServiceGuard and Oracle RAC.
- Integrated Storage Area Networks using LVM, EVA disk arrays, FC switches, Samba/CIFS and NFS.
- Implemented HP-UX virtualized solution for SAP environment.

# RACOM – Nové Město na Moravě, Czech Republic

Implemented company web platform in HTML, CSS, and PHP.

- Assembled hardware and software installation for desktops and servers based on Linux and MS Windows.
- Developed documentation system based on LATEX, Makefiles and CVS.
- Created a software tool for the management of RACOM's wireless radio network, programmed in C, PHP, MySQL and Oracle databases.
- Created technical documentation for RACOM's radio products, using LATEX, Makefiles and CVS.
- Developed shell scripts for Linux server administration.

# Other Experience

SOFTWARE DEVELOPER

#### Silicon Hill – Prague, Czech Republic

Project supervisor, software developer

10/2002 - Present







- Developed web platform for supervising card access, used PHP, MySQL, Apache, bash.
- Built Meteosat reception station for EUMETCAST with web access and Meteosat imagery processing, used C, x86 assembler with SSE, PHP.



**2014** – present

• GNU/Linux evangelist and propagator, member of organizing committee of *InstallFest* (Prague, CZ).

# **Personal Projects**

#### GNU/Linux Guru

HTTP://GNULINUX.GURU

- New project to deliver Linux related tutorial and cheat sheets to the community.
- Current published materials include cheat sheets for bash, ViM, Python and networking.

#### Author

IMAGE COMMUNICATION ON SHORT WAVES

- An e-book for ham radio operators and radio listeners interested in special communication modes for image transmission – SSTV, radio facsimile (WEFAX) and digital SSTV (HamDRM).
- Available on http://sstv-handbook.com.



Blogger

HTTP://BRUXY.REGNET.CZ/

• Technical articles on my areas of interest including: programming, Linux, ham radio and Meteosat reception.

#### Education

- Czech Technical University in Prague, Faculty of Electrical Engineering 10/2002 06/2008
  - Master's degree (Canadian equivalency evaluated by WES, ref. no. 2562464/ab).
  - Major/Specialization: Electrical Engineering and Computer Science.
  - Thesis: Image processing of Meteosat data.
- Technical secondary school SPŠ a VOŠ Žďár nad Sázavou

Specialized in control systems and automation engineering.



2000 - Present

#### Certifications

- HP0-P20: HP-UX 11i v3 System Administration; Prometric, License TC0DUS501E, issued 2010.
- Red Hat Certified System Administrator; Red Hat, License 150-126-340, issued 2015.

### Languages

- Czech, native language
- English, full professional proficiency (IELTS overal band score 7.0)
- Russian (русский язык), basic

