Andrew Bednoff

Software Developer
DevOps Engineer

Contacts

E-mail: andrew@commandr.stream
Mobile #:   +996 709 77 33 99
Telegram, Wire: @andrcmdr
Hangouts: commandr.stream/call
Skype: andy.bednoff
LinkedIn: linkedin.com/in/andrcmdr

Profile

Date of birth: February 2, 1989
Place of birth: Bishkek, Kyrgyzstan
Place of living: Bishkek, Kyrgyzstan, 720010
Citizenship: Kyrgyz Republic

Languages proficiency

English: Professional working proficiency (B2)
Russian: Native proficiency (C2)

Job opportunities

Software Developer: Go, Rust

About me

Experienced software developer, extremely passionate about modern trending technologies - Open Source Software, GNU/Linux, development of server-side software and systems middle-ware on Go and Rust, for distributed network services, manageable cloud and networking infrastructures, bring DevOps practices in development processes, integrate and usage of cloud infrastructure solutions (SOA, IaaS, PaaS, FaaS, ESB, MOM/MQ), Docker, Kubernetes, CoreOS, OpenStack, Juju, MAAS, working with high-load systems, big data, data mining and data analysis.
This directions are very interesting to me, have very high priority and importance to my personal growth.
Looking for job proposals, companies and teams to continue experience in these directions and for long-term employment.

Knowledge, experience and skills :: *Development*

Programming languages with compile-time type checking:
- ***Rust*** (rustc)
- ***Go*** (go, gccgo)
- ***Pony*** (ponyc)

Programming languages with flow & gradual type checking:
- ***Python*** (PEP-484 aka mypy, Cython)
- ***TypeScript*** (tsc with Node.js/V8)

Scripting programming languages with run-time type checking:
- ***Python*** (CPython, PyPy, Jython)
- ***JavaScript/ECMAScript*** (Node.js/V8)
- ***Shell Scripting*** (sh, bash, dash, ash)

Stylesheet languages (CSS preprocessors):
SASS/SCSS, LESS, Stylus

Version/revision control and source code management systems:
Git, Mercurial (hg), Bazaar (bzr), Subversion (svn)

Database management systems (DBMS):
- *Relational DBMS:* PostgreSQL, Postgres-XL, MySQL, MariaDB, CockroachDB, SQLite
- *Key-value store:* Redis+Sentinel, Memcached, Tarantool, Elliptics, BerkeleyDB, RocksDB
- *Document store:* MongoDB, CouchBase
- *Graph DBMS:* OrientDB
- *Search engines:* Elasticsearch, Sphinx
- *Time Series DBMS:* RRDtool, Prometheus, InfluxDB, Graphite
- *Distributed storages*: Ceph, GlusterFS

Knowledge, experience and skills :: *Development*

Data serialization formats & markup languages for API protocols & configuration storage - templators/preprocessors of data structures/schemes/models:
JSON (REST, RPC, GraphQL), Protocol Buffers (gRPC, Thrift), YAML, TOML, XML + XML Schema (RPC, SOAP)

Build automation, dependency management and resolving, vendoring/delivering/deployment and caching tools:
- *Language agnostic*: GNU Make, Meson, Sonatype Nexus
- *Rust*: Cargo
- *Go*: go toolchain (go get/install/build/mod), dep, Manul, Glide, GoPM+Switch, gopkg.in
- *Python*: PIP (Python Wheels) & EasyInstall/SetupTools (Python Eggs) + VirtualEnv
- *Node.js*: NPM
- *JavaScript*: Gulp, Grunt, webpack, Bower

Frameworks (asynchronous event-driven programming frameworks with non-blocking I/O for creating concurrent multi-threaded network applications and servers), ORMs, Templators:

- *Rust*: Crossbeam, Rayon, MIO, Tokio, tokio-minihttp/http2, Hyper, Rocket, Gotham, Actix, Nickel, Iron, Diesel (ORM)

- *Go*: Iris, Aah, Echo, Beego

- *Pony*: Wallaroo

- *Python*: Falcon, Bottle, wheezy.web, APIStar, Meinheld, Gunicorn+WSGI, Twisted, Tornado, SQLAlchemy, SQLObject

- *Node.js*: Express.js, ECT.js, Dust.js, Hogan.js, Handlebars.js, Mustache.js

- *JavaScript*: jQuery, ECT.js, Prototype, Underscore, Backbone, Ember, Angular, React, React Native, Polymer, Ionic, Apache Cordova, Adobe PhoneGap, Electron, NW.js (node-webkit)

Toolkits and APIs for binding programs and low-level libraries (FFI):
rust-ffi (Rust), cgo (Go), ctypes and cffi (Python), node-ffi (Node.js), SWIG

System Libraries, Interface Widget Toolkits:
GLib (GObject/GType, GModule, GThread, GIO), GTK+, Qt, QML, wxWidgets, ncurses

Message-Oriented Middleware (MOM), Message Queue (MQ), message brokers:
- NATS (text-based pub/sub protocol)
- Redis Pub/Sub + Sentinel
- ZeroMQ (brokerless MQ)
- Celery (task/job queue)
- RabbitMQ (AMQP, MQTT, STOMP)
- Apache ActiveMQ (AMQP, MQTT, STOMP)
- Apache Qpid (AMQP)

Source code editors and IDEs:
Sublime Text, Visual Studio Code, Atom IDE, GNOME Builder, Glade, wxGlade, Qt Creator, IntelliJ IDEA, GoLand, PyCharm, WebStorm

Knowledge, experience and skills :: *DevOps Toolchain*

Tools for collaboration working, revision control, project and source code (codebase) management, and bug tracking:
Gitea, Gogs, GitLab, BitBucket Server
Phabricator, Tuleap, Jira
Roundup, Trac, RedMine
Flyspray, Mantis, Bugzilla

Documentation engines:
Sphinx, MoinMoin, DokuWiki, MediaWiki, Confluence

Continuous Integration (CI):
Jenkins, Drone, GitLab CI, Travis, JetBrains Team City, Atlassian Bamboo

Dynamic program analysis - Continuous Testing (CT) and Quality Assurance (QA):
- *Software testing automation tools for functional and user acceptance testing*: CasperJS (for PhantomJS and SlimerJS headless browser engines), Selenium, Cucumber/Gherkin (TDD/BDD)

- *Interface testing automation tools*: dogtail, xdotool, AutoIt

- *Load and stress testing tools*: wrk/wrk2, Apache JMeter

Static program analysis - Security Testing:
Coverity Scan, Pfff, Infer, Flow

Continuous Delivery/Deployment (CD):
- *Containerisation and environment isolation*: Docker, Docker Compose, Portainer, LXC/LXD, Rocket (rkt, CoreOS), Atomic, Rancher, Oracle Railcar, Packer, Vagrant, Flatpak, Snapcraft (Snappy), AppImage

- *Cloud Infrastructure (PaaS, IaaS, FaaS/Serverless) Toolkits, cloud management frameworks for clusterisation and containers orchestration:*
Docker Swarm, Kubernetes, Juju, MaaS, OpenStack, OpenFaaS, Oracle Fn

Continuous Configuration (CC) and Provisioning - Infrastructure as Code (IaC):
- *Continuous configuration management tools*: Ansible, Terraform, Nomad, Juju, Salt Stack

- *Service discovery tools, service mesh support, ESB*: SkyDNS, Consul, Serf, Conduit, LinkerD, etcd, dnsmasq

- *Secrets management and storage*: Vault

Continuous Monitoring (CM):
- *Monitoring and logging tools*: InfluxData (Telegraf, Chronograf, Kapacitor, InfluxDB), Consul, Prometheus, Graphite, Sentry, Grafana, ELK Stack (Elasticsearch, Logstash, Kibana), pprof, cAdvisor, RRDtool, MRTG, Ganglia, Nagios

SaaS, IaaS, PaaS, FaaS (serverless) services:
OpenShift, Heroku, Amazon EC2/S3/Lambda

Knowledge, experience and skills :: Maintenance of IT Infrastructure Operations and Systems Administering

Operating systems and software distributions - GNU/Linux:
- Debian, Ubuntu Server/Cloud/Core
- Arch, Gentoo
- CoreOS, Atomic, Rancher, Alpine, OpenWRT, DD-WRT, Elastix
- Fedora, Red Hat Enterprise Linux (RHEL), CentOS, Oracle Linux, Scientific
- OpenSUSE, SUSE Linux Enterprise Desktop (SLED), SUSE Linux Enterprise Server (SLES)

Linux kernel security modules:
SELinux, AppArmor

Firewall:
netfilter/iptables

Network intrusion detection and intrusion prevention systems:
Snort, Suricata

Virtualization:
Vagrant, Xen, KVM, QEMU, Oracle VirtualBox, VMware, Parallels

Web-servers:
Nginx, Cherokee, Lighttpd, Hiawatha, Mongoose

FTP-servers:
vsftpd, ProFTPd

Mail-servers:
Courier, Exim, Postfix, qmail, Qpopper+SpamAssassin, policyd

IM servers (XMPP/Jingle):
ejabberd, Openfire

DNS-servers:
BIND, PowerDNS, djbdns/dbndns, dnsmasq

DHCP-servers:
ISC DHCP, Kea DHCP, dnsmasq

Dynamic routing servers (BGP/OSPF):
BIRD, GNU Zebra, Quagga

Proxy servers:
Squid, Polipo, Apache Traffic Server

Servers for other protocols:
NTPd, OpenSSH, OpenVPN, OpenLDAP, FreeRADIUS, Asterisk (WebRTC, SIP, H.323)

Knowledge, experience and skills :: *Time-line*

Technologies:	Years of experience in common - Years of use in practice:
Windows, batch shell scripting, AutoIt	10 - 2002-2012
GNU/Linux (RedHat, Fedora Core, Mandrake, SUSE, Debian, Gentoo, Arch), shell scripting (including GNU/Bash, AWK, sed)	10 - since 2008 as SysAdmin, 14 - since 2004 as user
Modula-2, Zonnon, Oberon-2	6 - 2003-2009
Delphi, Free Pascal + Lazarus	8 - 2004-2012
C, C++	5 - 2004-2009
i586/i686, x86-64 Assembly	3 - 2005-2008
Java, C#/Mono	4 - 2008-2012
Lua, MoonScript	6 - since 2012
JavaScript/ECMAScript (also CoffeeScript)	6 - since 2012
Python	5 - since 2013
Node.js	4 - since 2014
TypeScript	4 - since 2014
Ruby	4 - since 2014
Crystal	3 - since 2015
Dart	3 - since 2015
Go	3 - since 2015
Rust	3 - since 2015
Pony	1 - since 2017

Education

Institute for Integration of International Educational Programs at Kyrgyz National University (IIIEP KNU) — **2010-2012**

Faculty of Computer Technologies & Internet (FCTI) [Kyrgyz-American Department of Computer Technologies & Internet (KAD)]

Specialty: Computer science, Software development engineer

Specialisation: Conceptions of programming languages and type systems; Syntactical and lexical analysis, compilers theory and optimisations of code generation; Automation of software engineering practices and development processes

Work experience

Have a long-term experience in designing, engineering, implementation, development, integration and deployment of various server-side cloud native infrastructures and platforms, with applying of scalable service-oriented architectures (SOA), that focuses on high-load servicing and handling big data streams.

Time period:

Dos-Credo Bank (https://doscredobank.kg) - Bishkek, Kyrgyzstan
Software Developer (Go), DevOps Engineer, Team-lead
> Development of modern payment system (payment gateway, processing) and smpp servers for sms services.
> Introduction of DevOps processes to the development team from the ground up.

April 2018 - September 2018

OpenMesh (http://openmesh.com, https://cloudtrax.com) - Portland, Oregon, USA (remotely)
Remote outsource software developer (Go, Rust, Python, JS, Lua, Ruby), DevOps Engineer, Team-lead
> Migration of all legacy server-side cloud infrastructure and networking services to Go, Rust and Docker.
> Development of cloud-based network controller for remote management of large scale multinode wireless networks, consist of many different networking embedded devices, that's working mainly on OpenWRT with LuCI and Lua custom plugins for data mining and logging.

January 2015 - April 2018

Saima Telecom (http://www.saimatelecom.kg, http://www.saima4g.kg) - Bishkek, Kyrgyzstan
Node.js server-side software developer at billing division of IT department
> Development of OLAP analytics system for operator's billing platform

September 2014 - December 2014

Independent freelance practice and outsource development - Bishkek, Kyrgyzstan - Moscow, Russia
Python/Ruby/JavaScript (Node.js) Software Developer, Software Security Specialist (security audit, penetration testing), Software Testing Automation Specialist (QA)
> Analyse for security vulnerabilities and malfunction of Inline Telecom Solutions Bill-Master billing platform

January 2014 - September 2014

BM Technologies, Umai payment system (http://umai.kg, http://bm.kg) - Bishkek, Kyrgyzstan
DevOps Engineer, Software Security Specialist, Software Testing Automation Specialist (QA)
> Consulting for security cloud infrastructure planning, development and deployment processes of transaction processing payment system. Creating and adjusting of project DevOps processes.

September 2013 - December 2013

CodEx LLC (http://codex.io) - Wollongong, Sydney, NSW, Australia
Team-lead, Software Developer, DevOps Engineer, Software Security Specialist, Software Testing Automation Specialist (QA)
> Creating the telecommunication startup incubator in Australia, based in Wollongong and Sydney, NSW
> Development of high-load carrier grade comprehensive automation platforms (SaaS, PaaS):
>> Billing platform & payment transactions processing platform
>> OSS (Operations Support System)/BSS (Business Support System)
>> ERP & CRM systems
> Development with active self-using (dogfooding):
>> IP PBX communications server with support for WebRTC and XMPP, based on Elastix, Asterisk, OwnCloud/NextCloud+SpreedMe
>> Time Tracking System for remote outsource development team and employees (WpaaS, workplace as a service, Terminal Network Services for Thin Clients)

January 2012 - September 2013

Thuraya Telecom Satellite Operator (http://thuraya.com) - Dubai, UAE
Software Developer, Unix systems administrator (SysOps)
> Development of the middleware software platform for network operations center (NOC)

January 2011 - December 2011

Utel (UralSvyazInform) Telecom Carrier, ISP and Cellular Operator (http://usi.ru) - Ekaterinburg, Russia
Software Developer, Unix systems administrator (SysOps)
> Development the bundles of services and tariffs chains in billing platform for various groups of customers

April 2010 - December 2010

NeoLabs ASP (http://neolabs.kz) - Almaty, Kazakhstan
Software Developer, Unix systems administrator (SysOps)
> Development of billing system for hosting and ASP (SaaS, PaaS) platform

January 2009 - April 2010

MegaLine ISP (http://megaline.kg) - Bishkek, Kyrgyzstan
Linux systems administrator (SysOps) - Gentoo, Debian, Ubuntu

September 2008 - January 2009

MegaCom Cellular Operator (http://megacom.kg/eng/) - Bishkek, Kyrgyzstan
Unix systems administrator (SysOps), operations support and monitoring engineer

April 2008 - August 2008

Logic Direct Distribution LLC (http://logic.kg) - Bishkek, Kyrgyzstan
Network and hardware engineer (TechOps)

January 2008 - April 2008