Alexander V. Nikolaev

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Objective

Permanent or contract position of software developer (remote, C2C, basic rate 25-35/hour).

Summary

14-years experience in software development, 9-years experience in system administration, strong problem solving skills, initiative, adaptability, willing to accept responsibility, willing to learn, strong team player, and strong communication skills.

Accustomed to working independently, as part of a team, or leading a team of engineers.

Relevant experience and skills

- Hardware/software system integration.

- Operating systems: Linux, Sun Solaris, NetBSD - deep knowledge of system management in unix systems.

  - Proficient knowledge of Nix package manager and NixOS Linux distribution, contributing to nixpkgs, develop custom systems based on NixOS.
  - Deep knowledge of Debian/GNU Linux package management and configuration system.
  - Familiar with other major Linux distributions (both deb- and rpm- based systems, as well as less common)
  - Knowledge of DevOps (familiar with Salt and Ansible, Terraform, basic knowlege of others systems).
  - Expirience of bug triaging.

- Python (11 years of experience):

  - WSGI stack.
  - Buildout, and other python-based deploying technologies.
  - Twisted, asyncio, gevent (asynchronous servers, clients and process dispatchers)
  - SQLAlchemy (custom types, extensions)
  - Web frameworks (Pyramid, Flask, Tornado)

- Haskell (1 year of experience)

  - Development of command-line tools, parsers, serializers.
  - Modern Haskell-based web stacks (servant, yesod, wai).
  - Knowledge of Stack, Cabal, and all other related tooling.

- Nix/NixOS (2 years of experience)

  - Proficient packaging various open-source software, as well as knowledge how to deal with proprietary stuff.
  - Packaging and maintaining of private tree of packaged custom software.
  - Various CI and CD toolchains based on Nix
  - Familiar with various language-specific packages (i.e. Go, Python, Ruby)

- Other programming languages and technologies

  - Basic knowledge of Ocaml.
  - Basic knoeledge of PureSript, Elm.

- Various MQ brokers (RabbitMQ, Kafka, Amazon SQS)
- Erlang (OTP design principles, rebar, cowboy)
- Lua (including bindings for C/C++ libraries, and contribution to several open source projects.
- C++ (4 year of experience, proficient use of STL and Boost libraries)
- shell scripting, development related to system management.
- Javascript (basic knowlege to troubleshoot cases when clientside code goes into problems).
- Go (3 year of experience, is not my favorite language, but I know Go well)

Can read/understand code in most of modern imperative and functional languages.

- Knowledge of AWS cloud services, experience with Dynamo DB and SQS.

- Proficiency with docker, and related tools.

- Databases (basic knowledge of both SQL and NoSQL including Redis and Riak)

- Knowledge of Sun hardware platform.

- Network protocols: HTTP (including websockets), SMTP, HTTP, XMPP, developing custom protocols based on HTTP (REST/XML-RPC/JSON-RPC). Knowledge of peer-2-peer technologies.

Employment history

Victoria Nova (Lithuanian company)

Lead developer, CEO, CTO, company owner (April 2008 – now)

- Contract work for LogicEditor: Develop terminal server, leveraging legacy applications as web based SaaS (including python software to control servers via REST and/or websockets) (2017-2018)

- Contract work/internship with Serokell (http://serokell.io) Develop both customer-side code, and code for inner infrastructure. Junior/mid-level haskell. (Nov 2017- May 2018)

- Contract work for Asteris, LLC

    - Develop various components of Cisco's Mantl (https://github.com/mantl/mantl)
    - Develop storage related (LVM/FS) components of http://converge.aster.is (2015-2016)

- Contract work for SendGrid, Inc:

    - Custom tools to benchmark RabbitMQ and Kafka (erlang, and python)
    - Develop agent software for CleverDB project (python). Also supported packages of `cleverdb-agent` for major linux distributions.
    - Develop go-gmime binding (over 80% of API covered, opensource: https://github.com/sendgrid/go-gmime)
    - Varoius other in-house tools and libraries (golang, python, erlang) (2013-2015)

- Contract work for LogicEditor: Develop various enchancement for Lua infrastructure, and binding for Lua to third party libraries (most of this activity open sourced, and visible via my github profile) (2011-2012, lua)

- Contract work for customer, who wants to be anonymous Support of realtime web application in python (tornado), optimising memory usage. (2013, python, tornado)

- Contract work for "IT Infrastructure, Kiev": Was hired to work fulltime on OpenInkpot project, developed both system components and applications (2010-2011, c,c++)

- Contract work for "IT Infrastructure, Kiev": development various plugins for CoolReader application on LBook e-ink readers (2010, c++)

- Various web development (python, django/pyramid) for customers

DIP Studija (Lithuanian company)

Software developer (March 2007 – April 2008 as staff member) (April 2008 – August 2008 as independent contractor)

- Developed prototype of custom video hosting for in-house usage (storage and server parts) (python, twisted)
- Developed various custom web crawlers. (python, twisted)

Jet Infosystems (Russia)

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(June 2004 -- 2007)
QA Engineer and software developer.
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Developed system for automatically regression testing of complex software system. Administrated farm of servers for QA (solaris/linux) Developed scipts for automatic deployment OEM software. Developed automatic and interactive installers for solaris based software Developed log analyzer component for "Z-2 Firewall" (perl) Developed customized version of bug tracking database. (perl) Developed tool for generate appliance platform from set of debian packages

AltLinux (Russia)

Software Developer (August 2002 — June 2004)

- Prototyping automated build and test environment which led to 3 times shortening build/test/improve cycle. Setting up isolated environments for software packages building.
- Developed several components for configuration management system for firewall appliance (C++)
- Prepared Debian/GNU Linux DVD images to release (with additional packages with cyrillic fonts, and AltLinux developed software)

TransSoftMedia (aka Russian Linux Media Labs operation)

(October 2000 – July 2002) Software Analyst and Developer

- System integration for videoconferences and IP-phone appliances pre-production prototypes (C++,perl).
- Produced installable packages from difficult source code. Proficient use of `autoconf`, `automake`, `RPM` and `Dpkg` packaging tools.

Spoken languages

- English — excellent written english, fluent spoken.
- Russian — mother tongue
- Lithuanian — fluent

Professional interests

- NixOS linux distribution
- Functional programing languages
- Compilers and code generations

Links

- LinkedIn: https://linkedin.com/in/avnik
- GitHub: https://github.com/avnik

Notes

- Have EU residence status/work permit, can work as staff member (remote) or as independent contractor (B2B contract).
- As a B2B contractor I need no visa and no explicit work permit to work remotely in US/UK/other EU countries
- References are available upon request.