Yuri Bochkarev

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Summary

Linux Python backend developer with 15+ years of experience in building, testing and maintaining complex software systems. 6+ years of Python experience, 3+ years of Go experience, 6+ years of C++ experience, low-level background. Driven to get things done as well as to learn new skills, tools and technologies. Skilled to write efficient, maintainable and testable code.

Experience

Pexip – video conferencing solution — Oslo

Senior Software Developer (Cloud Service) — *June 2019 – present*

- Developed a video conferencing analytics platform that includes the following services:
- a service to track instanteneous information about calls, conferences, devices, users, etc (Golang, HTTP, websockets, Google PubSub)
- a service to track historical information about the number of calls, conferences, participants (Golang, sqlite, LMDB (embedded key-value store), HTTP)
- a service to track and link detailed information about calls and events that constitute such calls (Golang, MySQL, Google PubSub)
- a notification service (desktop/mobile) (Golang, FCM, APN)
- Technology stack: Docker, GCP/Google Cloud, Kubenetes, Gitlab, Grafana, Kibana, Loki, Ubuntu

IPONWEB – media trading platform (RTB, Ad exchange, DSP, SSP) — Moscow

Senior Software Developer (Internal Tools, Bidswitch) — *June 2017 – September 2019*

- Transitioned the user management and access control subsystem across departments that allowed for faster and simpler workflow and operations (Python3.6, Django 1.11, Django Rest Framework 3.6, Gabbi HTTP testing suite)
- Integrated Third-Party APIs with the internal discrepancy monitoring service (Python3.6, PostgreSQL 9.6)
- Added support for bulk operations to internal creative blocking service, which saved about 1 hour a day for client support team (Python3.6, PostgreSQL 9.6)
- Integrated Third-Party API with the internal creative approval service (Python3.5, asyncio, Cassandra 2.6)
- Optimized user group update microservice to reduce processing time by 3x (Python 3.4, pytest, pymongo, TokuMX)
- Developed a facade API service to the internal DB as a part of an integration with a client (Golang 1.8, Cassandra 2.6)
- Added metrics to the “logs to DB” loading tool, which provided better understanding and visibility of the tool’s internal state (C++ 11, Cassandra 2.6)
- Software development process: Scrum, Kanban
- Technology stack: Docker, Kubenetes, Sentry, Jenkins, Artifactory, OBS, Graphite, Grafana, Kibana, Ubuntu, Alpine

Senior Software Developer (Technology) — *May 2016 – June 2017*

- Extended the functionality of the campaign visualization and forecasting service (Python, Django, Numpy, Scipy, Pandas)
- Integrated forecasting service functionality with the custom testing stands
- Software development process: Scrum + Kanban

Software Developer (Technology) — *July 2014 – May 2016*

- Optimized network communication subsystem of the budget control server for advertising campaigns, which reduced total iteration time by 30% (Python, Twisted, Numpy, Pandas)
- Rolled out Continuous Integration infrastructure (Jenkins, Trial, pytest, custom testing stands)

Software Developer (R&D) — *January 2013 – July 2014*

- Refactored and developed the data delivery service, made it more modular, testable and robust (Python, BASH, Django)
- Added performance/time metrics to comply with the established SLA
- Standardized data transfer configuration DSL that is used across the company services
- Optimized file transfer time by integrating UDP-based file transfer solutions (UDT)

SmartLabs – interactive digital television (IPTV, DVB, OTT TV) — Moscow

System Department Developer — *September 2009 – January 2013*

- Developed an RTSP request redirector (C++, Qt)
- Developed a video content distribution and publishing automation tool (C++, Qt)
- Integrated a third-party encryption service with the video content distribution automation tool (VeriMatrix)
- Improved SmartMedia platform video server seek time by implementing a faster file segment lookup algorithm (C++, Qt, STL, live555)
- Implemented an adaptive streaming client that was used in Set-Top Boxes (C++, Qt, Apple HTTP Streaming)
- Developed an interactive build automation tool that helped developers save time and do fewer mistakes when building platform components (Python)
- Took part in the implementation of the adaptive streaming server (Python, Twisted)
- Accompanying protocols: HTTP, XML RPC, SOAP, RTSP, HLS

Autoscan — Ulyanovsk

Software Developer — *September 2007 – May 2009*

- Prototyped and developed network applications for real-time video transmission (C++, Qt, OPAL, libjingle)
- Application testing automation (AutoIt, Erlang)
- Accompanying protocols: XMPP, SIP, RTP, STUN

Ulyanovsk State Technical University — Ulyanovsk

Technician — *September 2006 – September 2007*

- computer class admin (11 computers, ASP Linux 9.0, Microsoft Windows 2003)
- set up video surveillance in the class room, technical support

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Education

Ulyanovsk State Technical University — Ulyanovsk

Master's degree, Faculty of Information Systems & Technologies, diploma VMA 0105774 — *2007 – 2009*

Bachelor's degree, Faculty of Information Systems & Technologies, diploma AVB 0512119 — *2003 – 2007*

Additional Education

Information Technology Alliance

Clojure Course	*April 2013*

udacity.com

Programming a Robotic Car	*April 2012*
Artificial Intelligence	*December 2011*

coursera.org

Computing for Data Analysis	*October 2012*
Algorithms: Design and Analysis, Part I	*April 2012*
Machine Learning	*December 2011*

coursera.org

Machine Learning: Classification	*April 2016*
Game Theory (HSE)	*March 2016*
Machine Learning: Regression	*February 2016*
ML Foundations: A Case Study Approach	*February 2016*
Cloud Computing Applications	*October 2015*
Image and Video Processing	*March 2015*
Algorithmic Thinking	*November 2014*
Cryptography, Part I	*June 2014*
Write Like Mozart	*March 2014*
Discrete Optimization	*August 2013*
Functional Programming Principles in Scala	*December 2012*

Skills

Technical OS: GNU/Linux (since 2009), Windows (2001 – 2009). Programming Languages: Python, C++, Go. Moderately experienced as well in: Haskell, Clojure, R, Scala, Erlang, Lua, AutoIt, Java, Octave, x86 assembler. VCS: hg, git, svn. Technologies: Unit Testing, Design Patterns, UML. Frameworks: Twisted, Pyramid, Django, Pandas, Scipy.

Language Russian *(native)*, English *(advanced)*, Norwegian *(intermediate)*.