## ALEKSANDR BOGDANOV

BACKEND/DEVOPS SPECIALIST

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github.com/synchrone

#### **Profile**

Technology-non-bound engineer, looking for an infrastructure / platform challenge.

#### **Technical**

Python	Java	C#
Git	PostgreSQL/PostGIS	Docker/Kubernetes
AWS (CFN, DynamoDB, SQS)	Ansible	Security, Cryptography, GNU

## Experience

#### Cloud Platform Lead at LOVOO GmbH

Kubernetes, CoreOS, Go, Advanced AWS, Google Cloud April 2016 - February 2017

- Deploying a slew if microservices in Golang to a distributed cloud-based Kubernetes cluster, optimized to handle 1.5 Gbit/s of API traffic
- Internal Platform as a Service for the teams
- Fully automated deployments, canary releases, traffic shifting for blue\green
- · Evaluating and benchmarking cloud providers for an optimal solution

#### Tech Lead at Home24 AG

#### Internal tools team, leading 3 developers

November 2014 - April 2016

- Logistic calculations project, handling millions of entries (migrated RabbitMQ to SQS)
- Massive 3rd party product data import re-architecture (SQS, DynamoDB, optimistic locking, Streaming XML)
- Starting an acceptance testing project, providing QA with the architecture for transparency and testcase code reusage (Codeception)
- · Major webshop checkout refactoring for testability and performance

#### Senior Backend Developer at Home24 GmbH

#### PHP, MySQL, Apache Solr

October 2013 - November 2014

- Optimizing a web e-commerce platform backend for runtime performance in a complex data environment
- Data denormalization over Solr for performance, search and faceting (custom Java data handlers)
- Bringing developer productivity tools for a big team (70 devs) to make recurring tasks efficient
- Internal 'git best practices' sessions, improving branching strategy, conducting git history investigations

## Sideproject of whenbus.ru

PHP, Kohana 3.3, jQuery.Mobile

September-October 2013

- Singlehandedly eveloped a mobile device-oriented website for a city transit system vehicle arrival prediction service, tracking more than 1400 stations for 35 routes.
- Source code @ github

#### Fullstack Developer at Moedelo.org

C#, ASP.NET MVC4, MS SQL Server, MongoDB

November 2012 - May 2013

- Online accounting product development for 300k+ users.
- Document file storage subsystem refactoring for high-load.
- Marketing campaign features implementation.

## Fullstack Developer with ER-Telecom ISP

PHP, MySQL, PostgreSQL, BitTorrent

June 2008 - November 2012

- Designed and implemented an advanced file sharing system. Cross-domain messaging, bulletproof uploading system, BitTorrent-based, Highload optimized; user ratings and self-moderation algorithms included.
- Created a 2-tier distributed video-on-demand delivery system, and a domain-specific content recommendation system.
- Online-gaming services maintenance; developed a web-based monitoring system, as well as championship management website

## Calendars and Contacts app

Python 3, Javascript, Sandstorm.io

February 2016

Side and personal projects

- Forked open source applications to provide an integrated solution for personal cloud and security sandbox platform.
- Implementing CalDAV and CardDAV protocols, ensuring various client compatibility
- Contributing to sandstorm.io, working together with core developers in an open-source fashion
- Setting up acceptance test suite based on Apple's CalDAV server tools

## Highcore project

Ansible, Sensu, Graphite/Grafana, AWS/CFN, AWS/SQS

May 2015 - July 2015

- Designed a workflow, enabling action traceability and issuer accountability
- Implemented parts of API backend, integrating AWS CloudFormation functionality with Sparkle template generator and Git
- Implemented a scalable metric gathering server, irrespective of the source (app/service/node)
  - · Metric-state-based alerting functionality
  - · Dashboards with actionable metric insights
- Implemented a flexible monitoring stack functionality, optimized for Cloud use
  - Fully dynamic host (de-)registration
  - · Nagios-compatible checks

#### Transmission-in-Docker

Docker, weave.works, weave.net

November 2013, July 2014, October 2015

- The aim was to encapsulate a transmission-daemon, a vpn client and a data storage server inside a
  containerized network, making those applications play nice together, without being exposed to the host's
  network
- Weave was used as docker's custom network driver
- The project was re-activated multiple times, due to the tools gradually maturing
- · Still work-in-progress due to the tooling limitations

#### Contributions to Sovereign

Ansible, Bash

August 2015, December 2014

- · Contributing to a set of tools for deploying a personal cloud
- ownCloud automatic configuration
- · Roudcube automatic configuration; CardDAV plugin ownCloud integration
- ownCloud XMPP integration

#### Contributions to Prosody.im

XMPP\Jabber, Lua language, PostgreSQL

July 2014 - December 2014

- Implementing XEP-0136 (Message Archive) support from scratch
- Integrating XEP-0136 with mod\_mam (XEP-0313) storage for compatibility

## The Red Button project

Arduino/C October 2015

- Implementing a programmable USB-keyboard emulating Big Button, emitting a shortcut
- UART-over-USB app-specific protocol implementation
- Storing programmed shortcuts in EEPROM energy-independent memory, with CRC consistency check

#### **UPnP Media Server**

C#, UPnP, vk.com

October 2015

- Implementing a UPnP Media Server in C#/Mono
- Making online media resources available for compatible apps in the local network using an open standard protocol

# Education & Certificates

## Penza State Technological University

2008-2013

Computer Science (diploma)

## Zend Technologies Ltd.

2011

PHP 5.3 Certified Engineer

## Microsoft Corp., Prometric

2011

Microsoft Certified Technology Associate, Windows Development Fundamentals