ALEKSANDR BOGDANOV
BACKEND/DEVOPS SPECIALIST

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Profile

My superpower is drilling deep into complicated systems and optimizing them
as a whole. I care about the nitty-gritty and appreciate efficiency.

Technical

TypeScript	GCP, AWS	Infrastructure as Code
PostgreSQL/PostGIS	Kubernetes	Continuous Delivery

Experience

Staff Software Engineer at AirDeploy

TypeScript, Postgres, NSQ, GCP, Fastly   **January 2019 - May 2021**

- Taking over a production service in Python, optimizing for memory (profiling, uwsgi, k8s)
- Architecting a new service in TypeScript with an open-core OSS model
- Designing for low resource usage to handle a mostly-write API at 300 mbit/s
- NATS->NSQ migration, fully durable disk-backed message queues up to 100 GiB
- Event-driven Sever-Sent Events implementation

Founder / CTO at Honest & Rare

Business Case Engineering, Team Leadership   **July 2019 - Present**

- Release Management
- Business Intelligence, Alerting and Reporting using MySQL/Postgres + Metabase
- End-to-End testing for business-critical paths on a brownfield project with Cypress
- Pragmatic and proven PHP, MySQL, nginx, AWS, Sentry, New Relic
- Scoring good Google Pagespeed/Lighthouse metrics for optimal conversion

Senior Software Engineer at Planet.com

Kubernetes, Python, PostGIS, Google Cloud   **February 2017 - September 2018**

- Implementing platform permissions system to serve satellite imagery (Flask, SQLAlchemy, GDAL)
- Billing engine, enforcing area download quotas (Bottle, low-level PostGIS)
- BigQuery-based Internal Analytics app (Google Datastudio as a UI)
- Handling 200 Billing API requests per second (uwsgi, postgres locks/transactions)
- Fully automated Delivery pipeline
- Migrating from Amazon Web Services to Google Cloud Platform (SQS, RDS, Docker)

Cloud Platform Lead at LOVOO GmbH

Kubernetes, CoreOS, Go, Advanced AWS & GCP   **April 2016 - December 2016**

- Deploying a slew of microservices in Golang to a distributed 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

Side and personal projects

Mix-O-Rama at Founder Institute

Startups, Business, Hardware Engineering   November 2018 - March 2019

- I made a working cocktail robot prototype, aiming to bring it to events market
- Pitching like there's no tomorrow. Lots of ideation, PoCs
- Steep learning curve, "do or die" program. High-quality networking with peers and mentors.

Kubernetes consulting

Kubernetes, AWS, OpenVPN, Apache Spark   May 2018

- Implementing a PoC of K8S deployment for a client
- Persistent volumes provisioning
- Implementing a debug-on-cluster approach with IntelliJ IDEA, keeping HDFS in the cloud

OSS Contributions to Cloudron

Terraform, NodeJS, Google Cloud Platform   September 2017, December 2017

- Fully functional app deployment for both AWS and GCP
- Implemented Google Cloud Storage backup driver from scratch
- Implemented Google Cloud DNS driver from scratch

Calendars and Contacts app

Python 3, Javascript, Sandstorm.io   February 2016

- 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

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

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