

# Sergey Vilgelm

## Senior Software Engineer

*Over 12 years of software development experience with expertise in OpenStack core components, Python, Golang. Ability to learn new technologies, out of box thinking, ability to manage projects, ability to work within tight deadlines, self-motivated, good team player.*

**Current location:** Austin, TX, USA

**Ready for relocation to:** Europe; Vancouver, BC, Canada

## Work Experience

### IBM

Oct 2019 - present  
Software Developer

- **Tech lead of a micro-service projects**
  - Implementing a micro-service using flask+flask-restplus in a tight deadline.
  - Implementing a rules engine using JsonLogic.
  - Code review, tracking tasks/user stories.
  - Coordination with the integration and UI teams.
- Implementing a micro-service using GO, gorilla/mux, Echo

**Technologies:** Python, Kubernetes, Docker, Rest API (flask + flask-restplus), Golang

---

### Mirantis

May 2013 - Aug 2019  
Software Engineer/Senior Software Engineer

- **IAM**  
Implementing a system to provide a central point of users and permissions management for Kubernetes and OpenStack. Written in Go lang, It uses Keycloak as an OpenID provider and makes it possible to integrate OpenStack and Kubernetes with Keycloak. Using Docker to deploy the IAM API server in a Kubernetes cluster.
- **Core developer at Patrole**  
Patrole is a set of integration tests to be run against a live OpenStack cluster. It has a battery of tests dedicated to validating the correctness and integrity of the cloud's RBAC implementation.  
(<https://github.com/openstack/patrole>)
- **OpenStack monitoring tool using RabbitMQ**  
A monitoring tool for OpenStack uses notification channels to analyze the messages and keep a history of object changes.

- **Keystone-migration**  
A migration tool for keystone objects from one cloud to another using api v3  
(<https://github.com/SVilgelm/keystone-migration>)
- **Glance-replicator**  
Glance-replicator for independent Keystone with api v3
- **Cloudferry**  
OpenStack cloud workload migration tool.  
(<https://github.com/Mirantis/CloudFerry>)
- **Neutron expert**  
OpenStack consultant in Neutron's team at Ericsson. Consulting the team members, making presentations, fixing the bugs in a code.
- **Contractor at Symantec**  
Fixing the bugs, improving a performance of the pl/pgsql scripts.
- **Vyatta Niblick**  
Developing a Quantum plugin together with a mechanism for deploying and configuring Vyatta VMs on demand.
- **Migration Volume in Cinder**  
Implementing capabilities to migrate volumes between nodes.

**Technologies:** Python, OpenStack components, Postgresql, Kubernetes, Docker

---

## Reggi Business

Feb 2012 - Mar 2013

Software developer

Enhancement of the system for domains registrar. Rewriting many modules from PHP to Python.

- **PowerDNS**  
Deploying the PowerDNS. Developing the manage system for a domain records on the Django and JsonRPC. Configuring database replicas to create child dns services.
- **Zabbix**  
Deploying and configuring Zabbix to monitor all Servers. Developing UserParameter scripts.

**Technologies:** Python, Django, PHP, PostgreSQL, JSON

---

## Aspan Telecom

Sep 2010 - Feb 2012

Software developer

Development and maintenance of the billing system.

- **Accounting equipment**  
Developing a module of accounting equipment.

**Technologies:** FreeBSD, PostgreSQL, Python, Turbogears, CherryPy

---

### **Arna (BeTop, Ducat),**

Dec 2008 - Sep 2010

Software developer

- **Billing system**  
Developing custom billing database, netflow collector.
- **NetUP UTM 5 Billing System**  
Deploying and customizing UTM5 web cabinet.

**Technologies:** Delphi, DevExpress, UniDAC, PostgreSQL, Oracle, NetFlow5, PHP

---

### **Electronic Archive Corp**

Sep 2007 - Oct 2008

Software developer

- **Saperion**  
Deploying and configuring the Saperion to customers.
- **Knowledge base**  
Developing a knowledge base system management based on Drupal.

**Technologies:** VisualBasic, Delphi, PHP, Drupal

---

### **Skif Trade**

Jan 2005 - Aug 2007

IT-technician, Software developer

- **Application for the cash registers**  
Developing software components for the cash registers.
- **IT-infrastructure**  
Deploying IT-infrastructure within 3 supermarkets.

**Technologies:** Delphi, MSSQL

---

## **Academic Records**

Almaty University of Power Engineering and Telecommunications, Kazakhstan.

Sep'1999 – Jun'2011

Electronic systems and technologies, Degree in Engineering.

---

## Certifications

### MongoDB

- **M001: MongoDB Basics**  
Nov 2019
- **M201: MongoDB Performance**  
Nov 2019
- **M103: Basic Cluster Administration**  
Mar 2020

### Executive Data Science

- **Data Science in Real Life**  
Feb 2018  
Coursera, Johns Hopkins University  
<https://www.coursera.org/account/accomplishments/verify/4SWSR94H3C3Z>
- **Managing Data Analysis**  
Feb 2018  
Coursera, Johns Hopkins University  
<https://www.coursera.org/account/accomplishments/verify/7Q2SS3P3MRMS>
- **Building a Data Science Team**  
Feb 2018  
Coursera, Johns Hopkins University  
<https://www.coursera.org/account/accomplishments/verify/Q5AVYQ8NS4BN>
- **A Crash Course in Data Science**  
Feb 2018  
Coursera, Johns Hopkins University  
<https://www.coursera.org/account/accomplishments/verify/V29Z294N7JGP>

### Getting Started with Google Kubernetes Engine

Dec 2019  
Google Cloud Training  
<https://www.coursera.org/account/accomplishments/verify/ZE5CLY8C7MZ9>

### Algorithmic Toolbox

Mar 2017  
University of California, San Diego & Higher School of Economics  
<https://www.coursera.org/account/accomplishments/verify/UDMF7Z3VLL8K>

### Computer Science 101

Jan 2015  
Stanford Online

+1 (669) 292 7940  
[sergey@vilgelm.info](mailto:sergey@vilgelm.info)  
[www.vilgelm.info](http://www.vilgelm.info)

<https://verify.class.stanford.edu/SOA/0211fc8379584949873e7f3ddd9cf2f1/>