# **Denis Trofimov**

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Portfolio and other contacts <a href="https://denis-trofimov.github.io/">https://denis-trofimov.github.io/</a>

# **EXPERIENCE**

01/2020 - now

Huma Therapeutics Ltd., London, UK, <a href="https://huma.com/">https://huma.com/</a>

Lead Platform Engineer

- Automated Pull Request Operation for Huma API backend team, making it possible to preview backend API in temporary cloud environments.
- Created Kubernetes operators to reconcile application and application compositions, inspired by docker-compose, to abstract away Kubernetes API complexity for developers.
- Created Kubernetes operators to reconcile cloud resources such as AWS S3 and GCS storages, Atlas and KubeDB provided MongoDBs, Redis cache, to enable managing these resources from controlling Kubernetes cluster.
- Led internal platform team of 3 senior engineers
- Automated CI/CD process, allowing the team to develop and test faster

### **Technology**

- Golang, Kubernetes, Operator SDK Go, MongoDB, Docker, GitHub CI
- Jira, Confluence, GitHub, VSCode
- GCP GKE, AWS EKS, Azure AKS, Terraform, Helm, ArgoCD, Helmfile

11/2019 – 06/2020 Sitt.me, Moscow, <a href="https://sitt.me">https://sitt.me</a>

CTO

Sitt.me – a babysitting crowd-sourced platform. My team consisted of PM, designer, QA, and developers: back-end, front-end, and mobile devs.

- Designed and implemented features like in-app notifications, video calls, etc.
- Handled deployment of 24 services to a private Kubernetes cluster production, staging environments
- Automated CI/CD process, allowing the team to test and deploy faster
- Detected and solved issues in our services
- Mentored back-end, and front-end devs

#### **Technology**

- Golang, Bash, Ruby, ReactJS, SQL; PostgreSQL DB, Redis, Maria, RabbitMQ, Firebase;
  Jira, Confluence, GitLab
- Engineering: Kubernetes, Docker, GitLab CI, ELK, Helm

#### 11/2018 - 05/2019

### Tinkoff, Moscow, <a href="https://tinkoff.ru">https://tinkoff.ru</a>

Senior Software Developer

- Refactored Text-To-Speech API service, using in-house Python async gRPC server library
- Designed and implemented CMS of a voice assistant using Flask, PostgreSQL
- Redesigned and implemented low-latency Text-To-Speech API service on Golang, Redis, PostgreSQL
- Deployed and tested services to a private Kubernetes cluster, automated CI/CD process using TeamCity
- Responsibilities included: code review, interviews, and mentoring developers from my team
- The team consisted of a technical lead, PM, 2 backend developers, 4 AI data scientists, and a mathematical linguist

### **Technology**

- Languages: Python, Golang, C++, SQL, bash
- Packages: gRPC, TensorFlow Serving, Flask, Gunicorn, NumPy, SQLAlchemy.
- DB: PostgreSQL DB, Redis, MongoDB
- tools: Docker, Kubernetes, Helm, Jira, Confluence, Bitbucket, TeamCity, PyCharm, Goland

#### 05/2017 — 09/2018

# Vzor Systems, LLC, Moscow, <a href="https://vzorsystems.ru">https://vzorsystems.ru</a>

Lead Software Developer

- Designed architecture and developed a bio-metric identification software (GUI client, server, and embedded).
- Hired and spearheaded a team of two software developers on this project.
- Optimized identity recognition using classic image processing algorithms and CNN
- Performed a technological proof test and prepared a NIST-compliant report.
- Have presented bio-metric identification prototypes at 3 Russian conferences "All-over-IP", "SKUD", "TB Security Technology"

### *Technology*

- Python, C++, Qt, C, SQL; Git (GitLab); Eclipse IDE, Qt Creator
- OpenCV, Caffe, SciPy; SQLAlchemy; gRPC, MQTT; PostgreSQL; Ubuntu, MS Windows Server

#### 03/2017 — 08/2017

Upwork Inc., USA, <a href="https://www.upwork.com">https://www.upwork.com</a>

Software Developer (Remote)

• Refactored a multithreaded VOIP traffic recording service from Python 2.7 to 3.4

- Added Google Cloud Storage, configuration features, fixed JSON API, FTP, and SFTP storage feature bugs.
- The team was PM, sysadmin, and 2 testers.

### **Technology**

- Python, SQL; Git Bitbucket, Atlassian Jira; Eric Python IDE, vim;
- Flask, GCS-client, psycopg2 for PostgreSQL DB, SQLite, SQLAlchemy, tcpdump, tshark, mawk;
- Deployed on Debian, CentOS Linux

#### 06/2016 — 02/2017

«Bigur-consulting», LLC, Moscow, https://bigur.ru

Backend Software Developer

• Web-commerce site back-end development for a wine importer, made on in-house Python framework from scratch.

#### **Technology**

• Python 3, ExtJS 4; Git; vim, UMLet; PostgreSQL DB, SQLite, Apache HTTP Server, WSGI

03/2011 — 05/2016

«Asoft», LLC, Moscow, http://www.asoft.ru

Software Developer

• Developed and deployed a railroad technological process modeling client-server application.

#### *Technology*

- C++, SQL, HTML, XML, JavaScript; VSC CVS; Eclipse IDE, KDevelop, emacs
- Oracle DB, MySQL, in-house RDBMS + Web Server; bash, Fedora Linux

01/2009 — 02/2011

Khrunichev State Research and Production Space Center,

Moscow, <a href="http://www.khrunichev.ru/">http://www.khrunichev.ru/</a>

Software Engineer

• Developed Borland C++ Builder applications for satellite trajectory computations

#### **Projects**

12/2019 — 07/2020

HackerU - Israeli Higher School of Information Technology and Security,

Moscow, <a href="https://hackeru.pro/">https://hackeru.pro/</a>

#### **Tutor**

• Tutored a course on Python for Big Data Analysis

#### 12/2019 — 04/2020

## Yandex Practicum educational platform, https://practicum.yandex.com/

**Tutor** 

• Homework reviewing, consulting students on Python, Django topics

### 09/2018 — 11/2019

# Learn Python programming courses, Moscow, <a href="https://learn.python.ru">https://learn.python.ru</a>

Mentor

- Mentored 3 groups of 6 students for 40 hours each wave.
- Supervised 15 diploma projects.

#### Nov 2018 - Dec 2018

New Year's Miracle

- I developed the personalized call order SPA site <a href="https://zvonok.novogodnee-chudo.ru/">https://zvonok.novogodnee-chudo.ru/</a>
- Technology: Python 3, Django, Celery, Jinja 2, PostgreSQL DB 10, Redis, Docker, Nginx, bare-metal Linux server

# Education

# Moscow State University after M. V. Lomonosov, Postgraduate in Applied Mechanics, Moscow, Russia

- Presented talk on my thesis at annual conference Lomonosov Readings
- Wrote thesis On Altering Trajectory of Dangerous Asteroids and Comets
- Performed calculations in MATLAB, Maple.
- Taught lab work on gyroscopes

# Moscow State University after M. V. Lomonosov, Bachelor of Science in Applied Mechanics, Moscow, Russia

#### **Courses**

#### **Practical Deep Learning For Coders**

Data Institute at USF in San Francisco by Jeremy Howard (Kaggle's #1 competitor 2 years running, and founder of Enlithic), <u>course18.fast.ai</u>.

## Innovative Production Management. Sales and marketing, 40 hours

«Academy of Management and Marketing», Moscow

# SME management. Negotiating skills. 100 hours

«IT Institute», Moscow <a href="http://www.ikt.ru/">http://www.ikt.ru/</a>

# **Business English for President Program Attendants, 100 hours**

Russian State Social University (RSSU), Moscow <a href="https://en.rgsu.net/">https://en.rgsu.net/</a>

# Professional technical analysis for stock trading

FINAM Education Center, <a href="https://www.finam.ru/">https://www.finam.ru/</a>