# **Personal Information**

Name Artem Mezhenin

Gender Male

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# **Summary**

I'm software developer with mathematical background. I'm very competent in web development, database design and message queues. I worked on several *intelligent* and *data-centric* web applications, and have experience in design and optimization of high-loaded systems.

# **Experience**

Freelance Developers

November 2013 - present. Toptal, LLC

## **Backend Developer (via Toptal)**

February 2020 - September 2020. Caterpillar, Inc., Remote.

 Implemented REST API for database with information about parts and vehicles produced by Caterpillar (Python, Django REST Framework, Azure)

## Senior Developer (via Toptal)

#### 2015 - 2019. Bayer CropScience, Remote.

- Worked closely with bioinformatics team in Bayer to developed web portal for their genomic data
- Implemented single-page application using AngularJS and various D3.js libraries for genomic data
- Developed backend with Python/Django so that it can handle their database with terabytes of data, interact with existing computational clusters and other Bayer projects
- Designed long-running aggregations, optimized complex queries and developed multiple tools to explore data in DBs and locate errors and inconsistencies
- Maintained high test coverage of backend code (above 95%)
- Configured and maintained instances of the project (Linux)

#### **Senior Developer**

## 2014 - 2015. TelepathData, Inc., Remote.

- Wrote modules for email analysis system in Scala and Play
- · Refactored monolithic Scala components into more modular structure
- Developed new frontend modules with AngularJS and simplified existing code

- with Restangular, lodash and other libraries
- Wrote functional tests with Selenium and Scala to tests functionality from user perspective
- Used Mocha and Chai for testing AngularJS modules
- Added Google Analytics to track basic information about user behavior

## **Backend Developer (via Toptal)**

# 2013 – 2014. WiserTogether, Inc., Remote.

- Developed health-care knowledge base in Python/Django and MongoDB
- Provide REST API to this database with complex graph traversal scenarios
- Created automation scripts for Openshift instance management
- Covered 100% of code with tests
- Wrote automated migration tool (similar to South) for model updates in MongoDB

#### **Senior Python Developer**

#### 2012 - 2013. Metabar, Moscow.

- Designed system for Internet statistics collection
- Replaced existing MongoDB sharding cluster(3 shards) with single replica set, after deep optimization and refactoring
- Developed highload backend with Python/Celery and RabbitMQ, that serves
   50M tasks per day
- Created custom OLTP/OLAP solution with MongoDB, that serves >30M op. per day
- Provided support and disaster investigation for production servers
- Automate deployments with Fabric
- Wrote asynchronous services on top of Yandex.Market API with Gevent

#### Senior Developer

#### 2011 – 2012. Tehnodar, Petrozavodsk

- Created vehicle tracking Web application in Python/Django
- Developed high-loaded database (MongoDB, >10M new geospatial data points per day)
- Designed scalable and failover architecture of the system
- Project planning
- Made significant performance boost by applying NumPy (package for scientific computing) for data analysis
- Install and maintain servers for project needs

#### **Developer**

#### 2008 – 2010. Petrozavodsk State University, Department of Computer Science

Created multiblog client application for the Maemo/MeeGo platform

#### **ACM ICPC contestant**

- Studied algorithms and data structures for 3 year
- ACM ICPC 2008-2009, NEERC, Certificate of Achievement

## Skills

Programming Python, JavaScript, Node.js, Go(golang), C, Java, Scala,

HTML/CSS, Solidity

Frameworks and libs Django, Celery, AngularJS, D3.js, React, Play, Akka, pandas,

Selenium, Gevent, Flask, ZeroMQ, Bootstrap

Tools Git, Mercurial, Eclipse, PyCharm, Fabric

Databases PostgreSQL, MongoDB, MySQL, Redis, Neo4j,

Memcache, sqlite, ElasticSearch, RabbitMQ

Administration Linux, AWS, Azure, gunicorn, Apache, Nginx, supervisor

## **Education**

Petrozavodsk State University, Russian Federation Bachelor degree in Applied Mathematics, 2010 Master degree in Information Systems, 2012

## **Additional education**

- **Bioinformatic Methods I** by Nicholas James Provart (University of Toronto). Coursera online course, 2017.
- **Introduction to Bioinformatics** by Alla Lapidus and others (Saint Petersburg State University). Coursera online course, 2017.
- The Data Scientist's Toolbox by Jeffrey Leek (Johns Hopkins University). Coursera online course, 2014.
- Introduction to Parallel Programming by John Owens(University of California) and David Luebke(NVIDIA Corp.). Udacity online course, 2013.
- Algorithms, Part I by Robert Sedgewick and Kevin Wayne, Princeton University. Coursera online course, 2012.
- Machine Learning by Andrew Ng, Stanford University. Coursera online course, 2012.
- **CS188.1x: Artificial Intelligence** by Dan Klein and Pieter Abbeel, University of California, Berkeley. Edx online course, 2012.
- M101 MongoDB for Developers by Andrew Erlichson. 10gen online course, 2012.
- M102 MongoDB for DBAs by Dwight Merriman. 10gen online course, 2012.

#### Links

StackOverflow <a href="http://stackoverflow.com/users/1325846/amezhenin">http://stackoverflow.com/users/1325846/amezhenin</a>
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<a href="http://stackoverflow.com/pub/artem-mezhenin/59/847/ba6">http://stackoverflow.com/pub/artem-mezhenin/59/847/ba6</a>

GitHub <a href="https://github.com/amezhenin">https://github.com/amezhenin</a>

Toptal <a href="http://www.toptal.com/resume/artem-mezhenin">http://www.toptal.com/resume/artem-mezhenin</a>

#### **Talks**

- MongoDB in a real world projects. Tbilisi MongoDB user Group, 2014.
- How to write your own Ethereum wallet. Community meeting in Batumi, 2018.