# Alex Tonkonozhenko

Head of Engineering

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## About Me

Like building complex software products. Enjoy working with big data and high load. Fan of DevOps methodology and clouds.

# Qualifications

- · Data engineering: Airflow, Python, AWS Athena, Kafka, ElasticSearch, SnowFlake, Grafana
- Web: Ruby, JavaScript, TypeScript, Rails, PostgreSQL, MySQL, Redis
- Containerization: Kubernetes, ECS, Docker
- · Common: AWS, Terraform, Git, Linux, Bash

# Experience

## **GR8 Tech**

https://gr8.tech/

**Head of Engineering** 

May 2022 — present

**GR8 Tech** is a global product company that provides innovative, scalable platforms and business solutions for the iGaming industry. GR8 Tech develops complete tech coverage for gambling businesses worldwide, including iGaming platform solutions, consulting, integration, and long-lasting operation services.

### Achievements:

- designed a modular data processing platform based on Data Vault, DBT and Apache Iceberg;
- designed a flexible Data API for Customer Data Platform and other company data;
- designed a high-level stream processing architecture for real-time metrics calculation and business-objects preparation;
- · replaced Google Analytics with self-managed cost effective solution;
- is responsible for the technical solution of the whole data platform and services on top of it;
- leadership of 30 people.

Technologies: AWS, Airflow, Python, Kubernetes, Terraform.

### Achievements:

- designed and implemented a data processing platform based on Airflow and AWS instead of legacy DWH based on Nifi and PostgreSQL;
- implemented DSL for simple implementation of Transforms in ETL based on AWS Athena;
- fully automated CI/CD;
- · implemented everything-as-a-code

Technologies: AWS, Airflow, Python, Kubernetes, Terraform.

**ManageBac** is online planning, assessment, and reporting platform for international schools, supporting over 2,600 schools in 120 countries. By providing schools with one unified system on a consistent, modern, and

## **GR8 Tech**

https://gr8.tech/

**Lead Software Engineer** 

April 2021 — April 2022

## ManageBac

https://managebac.com

**Lead Software Engineer** 

January 2020 - March 2021

mobile-ready interface, ManageBac offers a seamless & integrated experience for coordinators, teachers, students, and parents.

#### Achievements:

- introduced the platform for microservices based on AWS and Kubernetes;
- · developed and deployed several microservices to the platform;
- designed and implemented deep integration with 3-rd party Chat Provider;
- introduced React and TypeScript for frontend development in addition to ¡Query and CoffeeScript;

Technologies: Ruby, Ruby on Rails, JavaScript, TypeScript, Kubernetes.

**glomex** — content marketplace for content owners and publishers. glomex received the "Gartner Data & Analytics Excellence Award" in the "Best Data Management and Infrastructure" category.

glomex is focused on providing a one-stop solution for everything regarding video publishing — from transcoding a video file into multiple formats, processing of metadata, and providing a nice player for all platforms to monetization.

### **Achievements:**

- implemented the core service that receives all events from our customers;
- implemented a real-time data processing pipeline for analytics;
- implemented billing service based on specifications from the accounting department;
- migrated Python 2 to Python 3, dropped lots of legacy components;
- · introduced BI tool Metabase for internal customers;
- · implemented health monitoring using Grafana and AWS Cloudwatch;
- · implemented DWH based on Snowflake.

**Technologies**: Python, ElasticSearch, AWS (Lambda, Redshift, Kinesis, etc.), Kafka, K8s, Snowflake, Spark.

### Achievements:

- implementing DSL for core search service in the product;
- prepared zero-downtime migration of all existing services from regular server deployment to container-based solution and executed it successfully;
- · operated 15 microservices in a team of 5 people;
- in the team, we completely reworked the existing architecture in half a year due to rapid business changes.

**Technologies**: AWS (EC2, ECS, Cloudformation, Autoscaling, CloudWatch, etc.), Ruby, PostgreSQL, ElasticSearch, Redis

**Talkable** — Referral Marketing platform that is changing the way companies acquire and retain customers, by quantifying and accelerating the oldest marketing channel ever — word of mouth.

### **Achievements:**

- improved referral campaign debugging and reduced the amount of time needed to set up a new referral campaign;
- developed Talkable Android SDK from scratch.

Technologies: AWS (EC2, S3), Ruby, MySQL, Redis, Android.

## glomex

https://glomex.com

### **Lead Software Engineer**

December 2017 - December 2019

## glomex

https://glomex.com

### Senior Software Engineer

January 2017 — December 2017

## Talkable

https://talkable.com

Senior Software Engineer

January 2016 - January 2017

### Innovecs

### Software Engineer

May 2015 — December 2015

**Innovecs** — outsourcing software development company. In Innovecs I worked on the development of the portal that manages internal resources for the outsourcing software development company.

#### Achievements:

- · unified UI and UX across the product;
- · introduced a new UI design for the product;
- improved complex search performance that impacted all the customers;
- significantly reduced SLOC by refactoring big parts of the product.

Technologies: Ruby, Ruby on Rails, JavaScript, PostgreSQL, Redis.

The company was a TaoBao reseller that shipped goods to CIS countries. I modified the existing product, added some features related to TaoBao integration, and fixed performance issues. Also, I developed a partner program that allows users to receive their own turnkey website for selling products from TaoBao as a reseller.

#### Achievements:

- implemented partner program with integration with main website;
- fixed complex TaoBao integration bugs.

Technologies: Ruby, Ruby on Rails, JavaScript, PostgreSQL.

3dnear.me - A 3d-printing community that allows finding people with 3D-printer not far from you.

### Achievements:

- · Development of the product from scratch;
- Implementing complex search using Apache Solr and Google Maps API;
- Implementing order flow with dispute resolving;
- · Integrating with a 3D-model viewer based on three.js

**Technologies**: Ruby, Ruby on Rails, PostgreSQL, Solr, Redis, jQuery, Google Maps API

Worked on various websites, fixed bugs, and added some minor features.

### Achievements:

- implemented complex AJAX forms; developed reporting;
- integrated with various third-party systems.

Technologies: Ruby, Ruby on Rails, PostgreSQL, jQuery.

## **Education**

# National Technical University of Ukraine "Kyiv Polytechnic Institute"

**B.Eng. Software Engineering** 

2012 - 2016

## Languages

English (fluent), Ukrainian (native)

# A Little More About Me

Alongside my interests in software engineering some of my other interests and hobbies are travelling, snowboarding, hiking and board games.

## NDA

### **Software Engineer**

December 2014 - April 2015

## 3dnear.me

Software Engineer

November 2013 - December 2014

# Freelance

Junior Software Engineer

July 2013 - October 2013