# Rustam Galimyanov

## Lead Platform/SRE Engineer

Berlin, Enzianweg 80b rustam.gk@gmail.com +49 152 515 27166

## Summary

Result-oriented Lead SRE/Platform engineer and IT professional with broad experience in automation, development and delivery of distributed and resilient services and applications in several domains (finance, gov, semiconductors, blockchain), guiding and managing teams through SDLC and ALM: from requirements analysis to design, development, testing and operations. Excellent knowledge of capital markets, risk management and the financial domain in general.

Strong leadership, team building and project management skills.

Proven innovative thinker using advanced corrective action techniques to solve business and technical problems.

In-depth knowledge of enterprise architecture patterns, advanced performance techniques and cloud computing technologies. Strong equities/derivatives exchange architecture experience, trading algorithms, low-latency engineering knowledge and patterns for various low-latency and high-availability applications and services.

## Technical profile

- Languages: Python 2/3, C#, Java 8/9, C++ 17, GoLang, C++
- Cloud: Amazon Web Services, Azure, GCP, OVH, Equinix
- Operating systems: RedHat Enterprise Linux, Debian/Ubuntu, Oracle
- Performance: Performance techniques for low-latency systems
- ESB: Tibco FTL/RV, RealLogic Aeron, Kafka, RMQ, NetMQ, NATS
- Databases: Neo4j, Oracle, PostgreSQL, MySQL/MariaDB, Redis, Clickhosue
- Infrastructure: Kubernetes, OpenShift, Terraform, Ansible, Vault, Consul
- Observability: Datadog, Prometheus/Mimir/Loki, Istio, Elastic (ECE/ELK)
- CI/CD tools: GitLab, GitHub, Jenkins, FluxcD, Helm
- BigData: Apache Hadoop, Flink, Hive
- Networking: TCP/IP, SF OpenOnload, Maxeler, Corvil
- Tools: CUDA, Oracle DS, MaxCompilerMPT, OpenMP, OpenACC, Git, Maven
- Methodologies: Scrum, Kanban
- Management: Conflict management, Risk management

## Key Client Projects

- Chicago Mercantile Exchange: 4 projects (Performance improvements for core exchange applications, re-architecture, implementing FIXP protocol)
- FTL Capital GmbH: 1 project (Building a trading firm from the ground)
- Börse Stuttgart Digital Exchange: 1 project (Crypto exchange architecture & SRE)
- Ministry of Defence of Kazakhstan (Gov) 2 projects
- National Security Committee of the Republic of Kazakhstan (Gov) 1 project

## Work Experience

Dates <u>March 2024 - current</u>

Company SDUI GmbH (Remote, Germany)

Customer SDUI GmbH

**Position** Lead Platform Engineer

- Designed an IaC via Terraform (+ tests) for on-premise data centre infrastructure
- Full refactoring of existing Ansible repo
- Designed migration from on-prem to the cloud OVH Cloud + Azure
- New observability stack on Grafana/Lok/Mimir/Prometheus/Alloy
- New Kubernetes infrastructure for platform, observability and IAM
- Designed and implemented migration strategy to the cloud via utilizing company internal resources
- Managed a small team of 5 engineers
- Close collaboration with the Software engineering teams and CTO

#### **Environment:**

- C#, Python, GoLang
- MS Azure, OVH Cloud, CGM Cloud
- Ansible, Terraform, RMQ, MariaDB, MS SQL
- LGTM, Datadog, NewRelic, Vault, Semaphore, AWX
- Debian 9/10/11/12 Azure AKS, OVH Public Cloud

Dates October 2022 - March 2024

Company FTL Capital GmbH (Berlin, Germany)
Customer Renaissance Technologies, (NY 11733, US)

Position Chief Technical Officer (CTO)

- Designed a new trading venue (futures) for an external contractor
- Managed a distributed team of 18-25 s/l software engineers, SRE, quant analytics and data engineers
- Build cloud platform in Azure with terraform and fluxcd
- Configured Kafka + Clickhouse setup for the quant/SE teams
- Managed different frameworks and tools for modelling financial data
- Implemented an IAC(ansible, terraform) for algo-workloads in the cloud and on-prem
- Managed serverless infrastructure in AWS for the data science team
- Implemented DevOps pipelines, SRE best practices

#### **Environment:**

- Java, Python, C++
- Amazon Web Services, Equinix (US), CME/NYSE facilities
- Ansible, Terraform, Kafka, Tibco, Oracle DB
- Splunk, CrowdStrike
- OpenShift, RHEL

Dates February 2022 - September 2022
Company Yukka Lab GmbH (Berlin, Germany)

Customer Yukka Lab GmbH, UBS (Lugano, Switzerland)

Position Lead Platform Engineer

- Migration from the cloud to on-premise installation in data center, to cut costs.
- Managed the Kubernetes cluster in Hetzner and Equinix DC's(prod, stage, qa)
- Support the software engineering and data science teams

- Support running production ML infrastructure and troubleshooting
- Implemented the on-premise Kubernetes installations in Hetzner and Equinix data centres
- Created a separate environment for the quant analysts' team
- Designed, implemented, and maintained ClickHouse in a Kubernetes environment optimizing performance and reliability for large-scale analytical workloads.
- Collaborated with software engineers and data teams to optimize complex analytical queries and ETL pipelines
- Designed and implemented a high-throughput Kafka pipeline for real-time data ingestion into ClickHouse, optimizing message delivery and guery performance.
- Implemented Kafka Connect and custom consumers/producers for integrating data sources, including PostgreSQL, S3, and external APIs.
- Supported the quant team in the creation of new models based on news and technical indicators

- Python, Rust
- Amazon Web Services (EC2, S3, DirectConnect)
- Equinix (US), Telia Soneira (Finland)
- Ansible, Gitlab, Kafka, Redis, Clickhouse
- ElasticSearch, Loki, Prometheus, Grafana
- Kubernetes (on-premise), Docker

Dates <u>May 2017 - January 2022</u>

Company Chicago Mercantile Exchange (Chicago, US) Customer Chicago Mercantile Exchange (Chicago, US)

Position Lead DevOps Engineer/Tech Lead

- Modified the existing automation written in ansible, python, bash, plsql, perl scripts
- Analysed the architecture of exchange and technologies with bottlenecks findings
- Created the performance tests on dedicated environments
- Developed a strategy for migrating market data generation to the cloud
- Profiled the Java applications and analysed results for further improvements
- Worked on analysing and documenting procedures and steps for running performance tests
- Interviewed and hired team members, planned the team structure and responsibilities
- Created a few new environments for tests in AWS with Chef for configuration
- Wrote shell and python scripts for the automation profiling of Java applications
- Troubleshooting and fixing issues related to bamboo plans and performance environment
- Implemented FIXP/SBE protocol support

#### Environment:

- Python, Java 8, C++ 14, RHEL 6&7, perf, DTracer, Oracle performance analyser, Intel
- vTune, Oracle collector, Oracle Database 11g, Tibco, SF OpenOnload
- AWS & Baremetal
- Ansible, Chef, Bamboo
- Kubernetes, Docker
- Atlassian Jira/Confluence/Fisheye

Dates April 2020 - December 2021 Company

Börse Stuttgart (Berlin, Germany)

Customer Börse Stuttgart Digital Exchange (Berlin, Germany)

Position Freelance/ Platform Engineer

- Successfully delivered logging via Loki and ELK for a few different environments
- Implemented monitoring with Prometheus and Grafana
- Created architecture for FIX Gateway and Match Engine authentication mechanisms

- Created an Infrastructure for FIX Gateway with proper logging
- Implemented SLA's following SRE best practices
- Support and maintenance of vanilla Kubernetes
- Migrated automation is written in ruby to terraform for the data platform in AWS
- Troubleshooting and fixing issues in different environments
- Involved in exchange architecture activities

- GoLang, Ruby, Bash
- Ubuntu, Kubernetes, Vault
- AWS (IAM, CloudFormation, Lambda, SQS, Kinesis, EC2 etc)
- Ansible, Terraform, GitLab, GitOps
- Atlassian Jira/Confluence
- PostgreSQL, DynamoDB

<u>July 2019 - May 2020</u>

Company HERE Technologies (Berlin, Germany)
Customer HERE Technologies (Berlin, Germany)

Position Freelance/Platform Engineer

- Successfully delivered migration to AWS (Landing Zone framework)
- Implemented logging solution based on Elastic Cloud Enterprise (Elastic, Logstash, Kibana) in AWS
- Built and maintained container cluster with Kubernetes for qa, dev, prod environments and Helm v2/v3
- Developed a monitoring strategy based on Prometheus(K8s operator) and Dynatrace
- Performance metrics with OpenTracing and OpenTelemetry
- Developed observability and resilience based on Istio
- Interviewed and hired new team members, and developed a plan of onboarding with a continuous feedback approach
- Wrote terraform, shell and python scripts for the automation
- Troubleshooting and fixing issues related to CI/CD workflows

#### Environment:

- Python, Bash, Java 9
- RHEL 7, Ubuntu
- AWS (IAM, CloudFormation, Lambda, SQS, Kinesis, EC2 etc) & Azure
- Terraform, Ansible, GitLab, GitOps
- Atlassian Jira/Confluence
- PostgreSQL, Neo4j

<u>Oct 2015 - Mar 2017</u>

Company Kazdream Technologies (Astana, Kazakhstan)

Customer National Security Committee of the Republic of Kazakhstan

**Position** System Architect / Engineering Manager

- · Worked on automation and continuous integration processes with Jenkins and Chef
- as a System Engineer to create physical infrastructure in the private cloud with hardware from HP and Cisco.
- Created and maintained documentation of build and release processes and application configurations
- Designed the EC2 architecture to meet high availability application architecture and security requirements.
- Designed the Docker & Kubernetes architecture for multiple applications
- Created new Chef Cookbooks and updated existing ones.

- Analyzed the current stack, load and cost to brainstorm architecture to reduce the footprint and cost.
- Redesigned existing infrastructure for high availability using multiple AWS availability zones.
- Analyzed and monitored performance bottlenecks and key metrics to optimize software and performance.

- Java 8, Python, Go language, CentOS, PostgreSQL, MongoDB,
- AWS, Chef, Docker, Kubernetes, Jenkins
- HAProxy, ZooKeeper, Consul, ElasticSearch, RabbitMQ

<u>Oct 2015 - Mar 2017</u>

CompanyKazdream Technologies (Astana, Kazakhstan)CustomerGovernment of the Republic of KazakhstanPositionSystem Architect / Engineering Manager

- Participated in several private projects for the government as an Architect and System engineer
- Performed as DevOps for creating Dev and Lab environments for several projects
- Automated the release pipelines using Jenkins, Chef, Nexus
- Migrated applications and services to Docker and Kubernetes infrastructure from virtualisation solutions.

#### **Environment:**

- Java 8, Python, RHEL 7, PostgreSQL, Neo4j
- AWS, Chef, Docker, Kubernetes, Jenkins
- HAProxy, ZooKeeper, Consul, ElasticSearch, RabbitMQ

Dates <u>Feb 2015 - Sep 2015</u>

Company Mayalabs Software (Astana, Kazakhstan)

Customer LightTour LLC

Position Senior Engineering Manager / Architect

- Successfully collected requirements from clients and participated in UI mockups and prototyping
- Developed EC2 instances architecture for B2B web-platform
- Interviewed candidates, started project planning, priorities and budget
- Designed roles and groups for users and resources using AWS Identity Access Management (IAM)
- Used Chef to automate configuration management and applications.
- Designed AWS Cloud Formation templates to create custom-sized VC, subnets, NAT to ensure successful deployment of Web applications and database templates.
- Configured and maintained a network of Linux and FreeBSD servers.
- Created and maintained the production and testing environments in AWS using EC2, S3, ELB, Route53

#### Environment:

- PHP, JavaScript, CentOS, PostgreSQL
- AWS (EC2, S3, CloudWatch, CloudFormation), Chef

<u>Jan 2014 - Feb 2015</u>

Company Mayalabs Software (Astana, Kazakhstan)

Customer Ministry of Defense of the Republic of Kazakhstan

Position Tech Lead / Architect

- Performed as DevOps / Architect for creating architecture of web services and several private cloud services in AWS and private cloud
- Automated the CI/CD pipelines for release and development environments.
- Performed as Project Manager for successfully delivering product and for mockups and prototype approval from the client's side
- Worked on deployments to test, acceptance and production environments.

- Java 8, JavaScript, CentOS, PostgreSQL & PostGIS
- VMware vSphere, Jenkins, Ansible

<u>Sep 2012 - Dec 2013</u>

Company Mayalabs Software (Astana, Kazakhstan)

**Customer** Ministry of Defense of the Republic of Kazakhstan

Position Tech Lead / Java Developer

- Provided configuration management and support for several web applications, built and deployed to the production and testing environments.
- Participated as project manager for collecting business requirements, planning project estimates and team structure.
- Defined and implemented the Release Management Processes, policies and procedures
- Performed as network engineer for network performance tuning related to security and a lot of branches across the country
- Administration of CentOS servers which includes installation, configuration, and testing on both physical and virtual machines.
- Own the full lifecycle of the build system from analysis, development, implementation and support of builds to eliminate non-efficient practices and bottlenecks.
- Performed as DevOps/Architect for the creation of infrastructure, software design

## Environment:

- Java 7 (Spring, Hibernate), C++, CentOS, PostgreSQL, Couchbase DB
- KVM, Jenkins, Jira, Confluence

<u>Sep 2010 - Sep 2012</u>

Company Preventiva Business Services (Tomsk, Russia)

CustomerPreventiva Business ServicesPositionSenior Systems Engineer

- Provided configuration management and support for several web applications, built and deployed to production environments.
- Provided migration to the new infrastructure
- Monitoring and automation of deployment process
- Performed as network engineer for network performance tuning related to security and a lot of branches across the country
- Administration of CentOS servers includes installation, configuration, and testing on physical and virtual machines.

#### Environment:

- CentOS Linux, MS Windows Server 2003/2008, MySQL, MS SQL Server,
- KVM, Hyper-V, VMware ESXi

Dates Mar 2009 - May 2010
Company State Street Corporation
Customer State Street Global Services

**Position** C++ Developer

- Migrated internal applications existing functionality from Java to C++
- Worked on projects optimizing C++ code for financial software
- Fixing bugs in the company's current software and applications
- · Worked and developed analytics new features to increase the user experience
- Created applications such as loan and mortgage calculators

• C++, CentOS, Eclipse, UML, Oracle DB, SVN

• Jira, Confluence

Dates <u>Aug 2007 - May 2008</u>

Company Texas Instruments (Tomsk, Russia)

CustomerTexas InstrumentsPositionC++ Developer

- Migrated internal applications existing functionality from Java to C++
- Platform TI DaVinci TMS320DM6467 studying and understanding
- Developed and emulator testing of new features and enhancements for processing images with different filters
- Provided fixes for the bugs found during the testing
- Worked with analytics and developed new features to increase the user experience

#### Environment:

- Ubuntu Linux, Eclipse, UML
- Jira, Confluence, SVN
- C++, Code Composer, TI tools

## **Education**

- University: Tomsk State University of Control Systems and Radio-electronics (TUSUR),
   Tomsk, Russian Federation
  - Speciality: Electronic security systems
  - Graduate work: Intel Corp. multi-threading technologies to speed up high-CPU cryptography tasks
- Years of education: 2005-2010

## Personal skills

### Languages:

• Russian: Native language

English: AdvancedGerman: IntermediateFrench: IntermediatePolish: Beginner