

Sergei Shilko

Creativity is intelligence having fun - Albert Einstein



About



Berlin 12627



contact@sshilko.com



sshilko.com



sshilko



sergeyshilko

AWS

EC2

ELB

Lambda

S3

RDS

ElastiCache

VPC

CloudFront

Route 53

API Gateway

CodeCommit

CodeBuild

CodeDeploy

CodePipeline

CloudWatch

IAM

ECR

Cognito

Certificate Manager

WAF & Shield

SQS

SNS

Mobile Hub

PinPoint

WorkMail

Organizations

DynamoDB

Secrets Manager

Backend

Golang

PHP

MySQL

Redis

Percona

Summary

I'm engineer with hands-on experience in backends, REST & RPC APIs, AWS cloud certified. Skilled with online social networks, realtime chat, video call, online booking, accounting & billing, search, online payments, fraud & risk systems. Proficient with Docker, AWS, PHP, Golang.

Experience

MessageBird B.V.

June 2022 - Present

Senior Software Engineer - Billing & Accounting, Foundations (Go, K8s, AWS, GCP, PHP8) www.messagebird.com

Working on foundation services built with Go, K8s, PHP, AWS, GCP: accounts, accounting, billing, payments.

- REST APIs, OpenAPI v3, Google GRPC & protobuf APIs both in PHP8 and Golang 1.20
- Backend apps for message delivery over different channels: SMS, MMS, Voice, WhatsApp, Viber...
- Microservice architecture, platform services, product services, IaC, event bus, api-first, domain-driven design
- Customer UI portal improvements to authentication: adopt JWT tokens, reworked containers startup/shutdown, unit-test coverage
- Define and adopt SLO, SLI, alerting with Prometheus, Thanos & Grafana dashboards
- CP Billing & Accounting runtime with >5000 RPS billing OLTP workers - high load async billing
- Optimized high-load billing k8s cluster runtime performance, resulted in 60% cost reduction: opencensus, lightstep, jaeger
- Optimized speed of Gitlab CI/CD pipelines for K8s deployments: gitlab, docker, k8s, helm
- MEP billing, accounting, invoicing, pricing, quoting features in globally distributed multi-region app: golang/echo.v4, dynamodb/single-table
- Accounting security features like 2FA, SSO, reCaptcha, rate-limiting ...
- CPQ Quoting and Pricing project: set of APIs for self-serve application for creating custom enterprise sales offers

Tripod Technology GmbH

June 2016 - February 2022

Head of Engineering at Tandem Language Exchange App
www.tandem.net

Leadership and hands-on role, 1M DAU, 12+ Engineers, 50+ employees, education domain. Microservices applications, grow & manage team, analytics, business continuity. Building and running software at scale.

- Scaled backend infrastructure from 1000 RPM to 80000 RPM, from 100kDAU to >1mDAU and <50ms API response time
- Scaled backend capacity from 1000's of users to >15M users
- Applied cost savings plans and utilized AWS Spot instances to reduce costs by 32%
- Hired multiple AI/ML, Data, Backend and devOPS engineers.
- Migrated monolithic backend application into 15 independent services
- Introduced Golang & AWS Keyspaces/Cassandra, DynamoDB for high-load group chat application storage
- Promoted AWS Best Practices, executed AWS Well-Architected framework together with AWS solution architects
- Managed >40 EC2 servers across 3 AWS regions, migrated from AWS EC2 Classic to AWS VPC
- Updated codebase from PHP5 to PHP 7.4, Go 1.14 Docker 19, PHPUnit 9
- Supervised development of serverless microservices in Java/Kotlin/Golang & DynamoDB
- Split monorepository into >30 separate repositories with separate CI/CD
- Executed multiple refactoring projects in code, infrastructure, raw storage and databases
- Maintained backend roadmap and technology radar tech-radar.opensource.tandem.net based on ThoughtWorks
- Improved user retention analytics, subscriptions and overall revenue tracking
- Updated realtime messaging server RabbitMQ, secured authorization, added 3rd websocket/MQTT browser client
- Added support for in-app purchase gifting, subscription hold, grace

SphinxSearch

ManticoSearch

Docker

K8s

Beanstalkd

RabbitMQ

AMQP

MQTT

Puppet

Nginx

Git

PHPUnit

NewRelic APM

DataDog

HAProxy

Gitlab CI

Symfony

Grafana

Prometheus

AWS

GCS

Terraform

Leadership, SDM, SDLC

Scrum

Agile

Team Lead

Project Manager

Head of Engineering

Backlog, Roadmap, Delivery

Hiring

Budgeting

Team building

Cross functional teams

Mentoring

Jira

Confluence

C4 Model

Languages

English (*Fluent*)

German (*B2 - Advanced*)

Interests

Events

Berlin - AWS Summit 2014, 2015, 2016, 2017, 2019

KubeCon + CloudNativeCon 2018, 2019

Podcasts, Forums, Interests

Golang radio-t.com 2014 - 2021

Habr habr.com 2008 - 2020

AWS Podcast 2016 - 2022

periods, geo-search.

- Increased application infrastructure and performance/APM monitoring automation and alerting via NewRelic
- Built full CI/CD pipeline on AWS Pipeline inc. Blue/Green deployments and AWS ASG/AutoScaling
- Improved China & SEA connectivity via transparent HAProxy, ICP/Hosting issues resolved
- Built internal business KPI, retention, engagement and revenue tracking systems
- Enforced PHPUnit & integration testing, code reviews & code style policies
- Migrated application services into containers (Docker)

Tripod Technology GmbH

June 2013 - June 2016

Senior FullStack Software Developer at Tandem Language Exchange App www.tandem.net

Mature backend solutions for audio/video (tele)communications software. Developed public API for mobile clients.

- Implemented public API for native mobile clients
- Refactored old MVP prototype codebase
- Launched first production release 1.0
- Celebrated first 50 users sign-up on GA and first promotions on iTunes
- Deprecated legacy on-premise hosting and migrated into AWS EC2-Classic
- Celebrated '2015 Most innovative app of the year' award (Apple iTunes)
- Implemented PHP framework with open-source components
- Reduced API response times from ≥ 2000 ms to ~ 100 ms
- Implemented critical app functionality: in-app messenger, real-time chat, community live feed, email-reminders, user search and more

Yangutu LLC

November 2011 - November 2012

Lead Software Developer at Yangutu LLC meetville.com

Working on web based social network.

- Added API for supporting external 3rd party Game-platform add-on's
- Added AMF Flex/ActionScript API Server for import/export of data to mobile platform
- Added Facebook, Instagram, VK and other social networks integrations
- Extended user data import and export API's

eHarmony, Inc

August 2008 - September 2011

Software Engineer at eHarmony Inc www.eharmony.com

eHarmony Reporting and Management Tools for Risk Management team.

- Developed CMS/RMS Internal service from specification to manage and automate risks and fraud detection
- Working with sensitive client payment information
- Extended CMS/RMS service with flexible and configurable multi-role authentication system for different regions
- Added support for localization and translation of CMS/RMS
- Added analytics and audit tools for tracking and optimizing team (users or the CMS/RMS) performance

IponWeb

August 2007 - September 2011

Software Engineer at IponWeb www.iponweb.com

SOAP/Rest API for real-time AD Exchange platform - RightMedia

- Worked on SOAP-API for high-load real-time advertising platform at scale
- Heavily extended and rewrote existing functional test coverage, integrational e2e testing
- Covered many new edge cases in tests which lead to fixes in critical API parts

Yahoo!

May 2008 - March 2009

Software Engineer at Yahoo! yahoo.com

AD Exchange API - RightMedia

- Refactoring tests, code and documentation, working with remote Yahoo developers team. SOAP API. Perl. PHP5

Education

Grodnenski Džaržauņy Universitē

September 2005 - September 2010

MSc Psychologie Pädagoge Experimental psychology

The WAN Show 2019 - 2023
UWP by Umutun 2016 - 2021
Tom's Hardware
agilemanifesto.org
12factor.net
Investment
Startups
Crypto

Reading

Management
Agile
Scrum
Sci-Fi
Fantasy
Horror
Clean Code
TDD
Architecting for the Cloud
Isaac Asimov
Robert Heinlein
George Orwell
Terry Goodkind
Alan Kuper
Tom DeMarco
Robert Martin: Clean Code:
A Handbook of Agile
Software Craftsmanship
Adrenaline Junkies and
Template Zombies:
Understanding Patterns of
Project Behavior
Edward Yourdon Death
March
Alan Kuper The Inmates Are
Running the Asylum
Smart and Gets Things
Done: Joel Spolsky`s
Concise Guide to Finding the
Best Technical Talent
Frederick P. Brooks, The
Mythical Man-Month
E. Gamma Design Patterns.
Elements of Reusable
Object-Oriented Software
J. Hank Rainwater Herding
Cats: A Primer for
Programmers Who Lead
Programmers
Allan Kelly: Xanpan
Designing Data-Intensive
Applications: The Big Ideas
Behind Reliable, Scalable,
and Maintainable System
Jinesh Varia: AWS
Architecting for the Cloud:
Best practices
The Phoenix Project: A
Novel About IT by Gene Kim,
Kevin Behr, George Spafford
SCRUM The Art of Doing
Twice the Work in Half the
Time by Jeff Sutherland
The soul of a new machine
by Tracy Kidder
The five dysfunctions of a
team: a Leadership fable by
Patrick Lencioni
Crossing the chasm:
marketing and selling high-
tech products to
mainstream customers
The Deadline: A Novel about

GGPEK Elektrotechnik CollegeSeptember 2000 - September 2005
Electrical Engineering Elektrische Energietechnik (Power engineering)

Awards

Ultimate Go

Certificate #1latfj6ukq

AWS Certified Solutions Architect - Associate (SAA)

Certificate #3GV5K7KKC14Q17W1

AWS Certified Cloud Practitioner

Certificate #3B28554BK2EQ1PSD

Telc Deutsch B1 Zertifikat

Certificate #0503718

Project Management by Tom DeMarco

Solid Code: Optimizing the Software Development Life Cycle by Donis Marshall and John Bruno

The software development edge: essay on managing successful projects by Joe Marasco

Joel on software by Joel Spolsky

Why software sucks... and what you can do about it by David S. Platt

Programming Collective Intelligence by Toby Segaran

97 things every software architect should know: collective wisdom from the Experts