

Sergei Shilko

Creativity is Intelligence having fun - Albert Einstein



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English, German, Russian, Belarusian, Polish









BACKGROUND



ABOUT

IT Professional with 15+ years experience in backends, mobile APIs and AWS platform. Recently worked at Tandem: online language exchange app to learn languages, chat, video call, book tutors, get certified in language and find new friends. Working with Docker, Microservices, API's, AWS, Scrum, PHP, Golang, Java, Serverless, Kubernetes. Experience with mobile devices, payments, video/audio calls, messaging, social networks, realtime systems, fraud detection, risk management, hiring, project management, engineering lead. Education domain.



WORK EXPERIENCE

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

Support backend code & infrastructure, grow & manage team, more analytics, long-term goals. Ensure that the business is capable of 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 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
- o Improved China & SEA connectivity via transparent HAProxy, ICP/Hosting issues resolved
- o Built internal business KPI, retention, engagement and revenue tracking systems
- o Enforced PHPUnit & integration testing, code reviews & code style policies
- Migrated application services into containers (Docker)

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

Jun, 2013 - Jun, 2016 (3 years

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

- o 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 >=2000ms to ~100ms
- Implemented critical app functionality: in-app messenger, community userfeed, email-reminders, user search and more

Lead Software Developer at Yangutu LLC,

Nov, 2011 - Nov, 2012 **()** 1 year

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
- o Extended user data import and export API's

Software Engineer at eHarmony Inc www.eharmony.com,

Aug, 2008 - Sep, 2011 3 years 1 month

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

Software Engineer at IponWeb www.iponweb.com,

Aug, 2007 - Sep, 2011 **3** 4 years 1 month

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 funtional test coverage, integrational e2e testing
- Covered many new edge cases in tests which lead to fixes in critical API parts

Software Engineer at Yahoo! yahoo.com,

May, 2008 - Mar, 2009 **①** 10 months

AD Exchange API - RightMedia

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



SKILLS

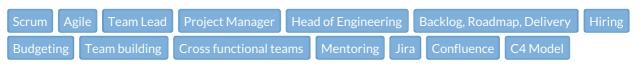




Backend



Leadership, SDM, SDLC





EDUCATION

Experimental psychology, MSc Psychologe Pädagoge, Grodnenski Dzjaržauny Universitet Sep, 2005 - Sep, 2010

Elektrische Energietechnik (Power engineering), MSc Electrical Engineering, GGPEK Elektrotechnik College Sep, 2000 - Sep, 2005



AWARDS

Master Cloud-Native Infrastructure with Kubernetes, Course by LinkedIn

Awarded on: Feb 07, 2022

AWS Certified Solutions Architect - Associate (SAA), Certificate #3GV5K7KKC14Q17W1

Awarded on: Dec 13, 2018

Telc Deutsch B1 Zertifikat, Certificate #0503718

Awarded on: May 01, 2018

AWS Certified Cloud Practitioner, Certificate #3B28554BK2EQ1PSD

Awarded on: Nov 21, 2020

