Nikita Vaniasin

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- **12+ years** of **Software Engineering** experience
- Collaborated directly with **stakeholders** as a **freelancer/consultant**
- Academic researcher (**PhD**), mentor, delivered university lectures
- **Co-founded** and **led** a small business from inception to over **2500+** paying users
- Background in **Database optimization**, **High-performance cloud platforms** and building the **data-intensive applications**

Experience

Senior software engineer   ArangoDB (remote)   **Feb/2022 - Present**

- Integrated **Machine Learning** components into the **Kubernetes operator**, enabling users to run ML tasks on their on-prem deployment.
- Designed and fully implemented a tool for migrating on-prem installations to **managed cloud solution** (both client tool and backend components)
- Reworked and re-structured Operator **documentation** to eliminate duplication and make it more **user-oriented**.
- Automated the creation of **OpenAPI** validation schemas for **Kubernetes CRDs**, reducing manual efforts.
- Upgraded "DC to DC cluster synchronization" tool to use a newer version of **DB-driver** resulting in **performance** improvements.
- Unified and improved PR checks and **CI/CD** pipelines for all five main **Golang** projects increasing code quality and speeding up the release cycle
- Optimized **leader election** mechanics for **Go** projects, utilizing a new polling **API** to reduce resource consumption and lower the load on DB servers.
- Introduced automatic security vulnerability scanning for all five **Golang** projects using **govulncheck**, enhancing the **security** of build artifacts.

Senior Software Engineer   CloudRadar (part-time, remote)   **Mar/2019 - Dec/2021**

- Working mostly on **server-monitoring** software, I managed to refactor legacy code while optimizing the performance of metrics collection.
- Designed and built the novel tool to set up **remote tunnels** to servers in security-tightened environments. Acquired by **RealVNC**.
- Established **CI/CD** pipelines, packaging and delivering binaries (deb, rpm, windows), saving 10 human hours monthly.
- Implemented async job execution and monitoring, empowering customers to track **metrics** and create **alerts** for scheduled tasks.

Freelancer   self-employed (part-time, remote)   **Mar/2018 - Jan/2022**

- Gained experience in **communicating with stakeholders**, gathering requirements, and resolving conflict situations. At the same time, created many projects in different fields, broadening my skill set: **Docker** Volume Plugin for **LVM**, Suppliers ordering system (Node.js, Go), High-performance web-crawler (Go), Mattermost plugin (Go), and others involving **Kubernetes**, **nginx**, **Linux**, **CI/CD**, and **Protobuf**.

Lecturer/tutor   Local universities, Yoshkar-Ola   **Sep/2015 - Jan/2018**

- Delivered lectures on **Database Programming & Information Retrieval**, Software Development Management (**Agile** & **Scrum**), and an introductory course for first-year students. Over 80% of attendees are now employed in international companies.
- **Organized** multiple nationwide Olympiads in informatics using open-source software.

Software Engineer → Senior Software Engineer   **iSpring Solutions**, Yoshkar-Ola   **Jun/2012 - Mar/2018**

- **Mentored newcomers** and **spoke** at internal meetups; four of my five mentees secured permanent contracts.
- Led a small team to integrate the Webinars platform (**WebRTC**), boosting upsell for existing customers.
- Designed the 'Webinar Recording' feature, enabling the saving of sessions in a playable format.
- Automated the release process using **TeamCity** and **Fabric**, saving ~20 human hours monthly.
- Optimized a permission access system for served files (**OpenResty+Lua**), leveraging **Redis**-stored permissions to significantly reduce response time.
- **Designed and implemented** iSpring Content Library backend, powering the "Content Library" feature.
- Developed backend **.NET** service for OS-independent processing of MS Equation files.
- Rewrote hundreds of test cases using **Codeception**, adding **E2E** tests, and reducing escaped defects.
- Optimized backup tool for main product sites, significantly **speeding up** the process.
- Reworked the hierarchical permissions system for shared files access using **closure-table** approach which resulted in higher RPS and lower resource usage.
- Implemented video transcoding using **AWS** Elastic Transcoder / SNS / S3, reducing infrastructure costs.
- Enhanced in-browser data recovery system for user statistics, reducing data loss to ~2%.
- Implemented **full-text search** using Sphinx, enhancing user satisfaction.

Education

Mari State Technical University (Volgatech)	Yoshkar-Ola, Russia
PhD, Computer Science	2015 - 2020
Mari State Technical University (Volgatech)	Yoshkar-Ola, Russia
Combined Master's and Bachelor's degree (5 years), Computer Science	2010 - 2015

Publications

- **Model and algorithms of Integrated Development Environment with structure editor for software source code**
  PhD thesis, 2020
- **Hierarchical Semantic Database Structure of the E-Learning Systems**
  Chapter 24, Nikita Vaniasin
  Handbook of Research on Estimation and Control Techniques in E-Learning Systems, 2016

Side-projects

- breezzly.ru - platform for UX/UI design education. Co-founder, complete technical execution. Started as a hobby project; now educates 2500+ paying customers in UX/UI skills.
- **Open-source**: occasionally contributing to Golang compiler and some popular go packages.

Skills

Programming Languages: Go, Python, PHP, C, C#, Java, Lua, C++, JS/TypeScript/HTML/CSS.
Databases and search: MySQL, PostgreSQL, Redis, MongoDB, ArangoDB, DynamoDB, Sphinx, Elastic Stack.
Tools and Frameworks: Kubernetes, Docker, Jaeger, Apache Kafka, Nats.io, envoy, nginx / openresty, ansible, Zabbix, Grafana, Prometheus, WebRTC, GRPC.