

Konstantin Amelichev

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github.com/kik0s

EXPERIENCE

Huawei: *ML Research intern*, (2025). Autonomous driving simulation

- Research of Large World Models for controllable video generation
- **Technologies:** Python, Pytorch, Generative AI

Datagrok.ai: *Software Engineer*, (2023-2025). Data Analysis Platform for Bio- and Chem-Informatics

- Core development of an extensive ML toolkit: WebAssembly-compiled models, interactive UI playground, automatic quality evaluation, MLFlow integration
- Design, development and user feedback sessions of Sticky-meta: cross-spreadsheet data annotation tool.
- Led company-wide initiative on CI/CD optimization. Introduced tailored tools for regression detection and issue tracking to assist developers and QA team during release cycle
- **Technologies:** Dart, TypeScript

Neiro.ai: *Backend Developer*, (2022-2023). Generative AI startup, social AI, chatbots.

- Built a cloud ML API gateway: 99.9% system uptime, 10-minute incident response time. Integrated APIs across multiple departments.
- Rapid prototyping for PMF experiments: personalized chatbots and video creation services
- **Technologies:** Python, Go, Google Cloud Platform, Kubernetes, gRPC

High Nu: *Infrastructure Developer*, (2022). High-frequency trading startup

- Expansion of market data sources by integration with cryptocurrency exchanges' APIs
- Reduced data processing duration from 1 day to 5 minutes, enabling near-real-time strategy validation
- **Technologies:** Rust, Python, Ansible

Tinkoff.ru: *Backend Developer*, (2020-2022). AdTech department, mobile banking app, 20M user base

- Development of advertising technologies (such as DMP, DSP) used for in-app recommendations
- Led RD for an MVP of content-based image search of creatives using similarity matching
- **Technologies:** C++, Python, high-load systems, RTB advertising

EDUCATION

- **École Polytechnique (2023-2025)**, Master of Science and Technology
AI & Advanced Visual Computing. GPA: 3.96/4.0
- **Higher School of Economics (2019-2023)**, Bachelor of Science
Applied Mathematics and Informatics. Specialization in Distributed Systems. GPA: 8.8/10.

LANGUAGES

<i>English</i>	Advanced level
<i>Russian</i>	Native speaker
<i>French</i>	Intermediate level

OPEN SOURCE CONTRIBUTIONS

DSLab github.com/osukhoroslov/dslab

- Formal verification of distributed systems with model checker.

grpc-gateway github.com/grpc-ecosystem/grpc-gateway

- Handling media data with multipart/form-data and macroses.

knot-resolver github.com/CZ-NIC/knot-resolver

- Anti-censorship feature for DNS resolver.

TECHNICAL PROJECTS

Starcraft AI Bot github.com/VladPyzh/starcraft-bot

- Created AI agent for StarCraft: Brood War using BWAPI. Designed architecture for build orders, resource management, combat control, and base expansion. Developed middleware to work around BWAPI limitations.

Digitalization of Orienteering Maps github.com/KiK0S/maps-analyzer

- Application for analysis of orienteering city races using UNet for semantic segmentation of map photos, detecting race configuration and finding optimal routes.

3D Rasterizer from Scratch github.com/KiK0S/3d-framework

- Library for processing 3D scenes and real-time rendering using only “set pixel” graphic primitive. Self-written rasterization and scene manager.

LightCuts Ray Tracer github.com/KiK0S/my-lightcuts

- Implemented physically-based renderer using LightCuts algorithm for efficient many-lights scenes. Benchmarked different rendering methods showing significant reduction in lights evaluated while maintaining quality.

SimSearch github.com/KiK0S/similarity-search-coursework

- Research on ANN problem and architecture of search engine for any object type. Led to content-based image search service with similarity matching.

COMPETITIVE PROGRAMMING ACHIEVEMENTS

ICPC SWERC 2024: 1st place, Lyon (2024)

Stockly Student Contest: 1st place, Paris (2025)

ICPC Europe Championship: Bronze medal, Porto (2025)

ICPC Moscow Programming Contest: 2nd award (2020)

National School Programming Olympiad: Gold medalist, Innopolis (2019)

Open School Programming Olympiad: Gold medalist, Moscow (2019)