

Contact

d.v.kornev@gmail.com

www.linkedin.com/in/dmitrykornev
(LinkedIn)
tswr.ch/ (Personal)

Top Skills

Ranking Systems
Distributed Systems
LLM Agents

Languages

English (Full Professional)
Russian (Native or Bilingual)
German (Elementary)

Certifications

Business English Certificate (BEC Higher)
Certificate of Proficiency in English (CPE)

Honors-Awards

Award from Sverdlovskaya oblast governor for the best work in the field of informatics, telecommunications and control systems

Grant from SKB Kontur "Grants for Young Lecturers"

Scholarship of the first Russian president B.N.Yeltsin for outstanding achievements in studies and scientific research

Scholarship of Sverdlovskaya region governor for outstanding achievements in studies and creative activities

Scholarship of Vladimir Potanin

Publications

On Numerical Solution of Positional Differential Games with Nonterminal Payoff

Dmitry Kornev

Senior Machine Learning Engineer | Core Ads Quality | LLM Agents | AR/VR Depth | Zurich
Switzerland

Summary

With over a decade of experience, I specialize in machine learning, ranking systems, and distributed systems. Currently, I contribute to core ads quality and relevance measurement systems at a leading global technology company, focusing on impactful, large-scale solutions.

My professional journey includes expertise in developing real-time computer vision models for AR/VR devices, advancing agentic research environments for LLM agents, and engineering personalized geo-service systems. I am driven by a commitment to innovation and collaborative success in the tech industry.

Experience

Leading Global Technology Company

4 years 1 month

Machine Learning Engineer

November 2025 - Present (3 months)

Zurich, Switzerland

- Design and ship measurement systems for core ads quality and relevance at global scale

Backend Infra Engineer

June 2025 - November 2025 (6 months)

Zurich, Switzerland

- Built and maintained large-scale agentic research environments and simulators used by researchers working on next-generation LLM agents

Computer Vision Engineer

January 2022 - June 2025 (3 years 6 months)

Zurich, Switzerland

- Developed and shipped real-time depth estimation and segmentation models for consumer AR/VR devices.

On Numerical Solution of Differential Games in Classes of Mixed Strategies

Game Theory Applications to Guarantee Optimization in Dynamical Systems with Control Delays

On Numerical Solving of Differential Games with Nonterminal Payoff

On Guarantee Optimization under Conditions of Integral Constraints on Control Actions and Nonterminal Quality Index

- Acted as the primary expert for the C++ on-device depth inference stack, enhancing performance and reliability.
- Delivered impactful prototypes and proof-of-concept demos that influenced the AR/VR product roadmap.
- Fostered strong cross-functional partnerships to drive project success.

Yandex

6 years

Lead of ML & Quality Team

February 2016 - January 2022 (6 years)

Moscow, Russian Federation

- Led a team of 6 engineers to develop automated systems for map improvement and geo service quality enhancement.
- Utilized machine learning and computer vision techniques to build personalized map-quality systems.
- Fostered a collaborative environment to drive innovation and efficiency in geo services at Yandex.

Senior Machine Learning Engineer

2018 - 2019 (1 year)

Moscow, Russian Federation

- Developed advanced algorithms for points of interest ranking and map personalization, enhancing user experience.
- Improved GPS positioning and tracking systems, ensuring accurate location services for users.

Software Engineer

2016 - 2018 (2 years)

Moscow, Russian Federation

- Enhanced the search backend at Yandex.Market, improving product ranking quality and efficiency.
- Developed innovative features for ranking using advanced index storage technologies.
- Implemented robust incident detection mechanisms to ensure high system reliability.

Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences

Lead Software Engineer, Researcher

October 2011 - January 2022 (10 years 4 months)

Yekaterinburg, Russia

- Led the development of innovative numerical methods and algorithms for solving positional differential games.
- Engineered efficient big data processing techniques utilizing modern supercomputers with multicore and GPGPU technology.
- Authored over 35 scientific publications, including 8 in recognized journals and 4 international papers.
- Awarded a certificate of software registration from Rospatent and recognized by the Sverdlovskaya oblast governor for excellence in informatics.

Ural Federal University

13 years 9 months

Senior Lecturer at Institute of Mathematics and Computer Science
October 2007 - August 2020 (12 years 11 months)

Yekaterinburg, Russia

- Developed and delivered an engaging Python3 course, enhancing online learning through video lectures and materials.
- Coordinated the Ural Computer Science Club division, promoting student collaboration and community engagement.
- Advised students on coursework and theses, providing guidance on complex topics in computer science and security.

Engineer at the Laboratory of Software and Hardware Means of Information Security

December 2006 - December 2015 (9 years 1 month)

- Directed and created the first international computer security competition RuCTFE held in Russia, managing a team of 20 developers.
- Developed tasks for annual competitions, contributing to the growth of the computer security community in Russia.
- Participated in various CTF challenges, enhancing skills in auditing and administering Unix-like operating systems.
- Achieved victory as part of team HackerDom in the international C.I.P.H.E.R. 4 competition, showcasing expertise in computer security.

Education

School of data analysis (Yandex)

Data analysis · (2015 - 2017)

Ural Federal University

Doctor of Philosophy (Ph.D.), Mathematical Modeling, Numerical Methods and Software Systems · (2009 - 2015)

Ural State University named after A.M.Gorky
Master's degree, Mathematics, Applied Mathematics, System
Programming · (2007 - 2009)

Ural State University named after A.M.Gorky
Bachelor's degree, Mathematics, Applied Mathematics, System
Programming · (2003 - 2007)

Gymnasium 94, Yekaterinburg.
Higher education · (1993 - 2003)