### Iskander Sitdikov

A researcher, mathematician, and software engineer

Kuala Lumpur, Malaysia

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Education

Skills -

2013–2015 **Ph. D. degree (unfinished)**, CMC MSU<sup>1</sup>, Moscow, Russia

Laboratory of Mathematical Methods of Image Processing affiliation

supervisor Prof. Andrey S. Krylov

2008–2013 **Specialist (M. S.) degree**, CMC MSU<sup>1</sup>, Moscow, Russia

field of study applied mathematics and computer science specialization mathematical physics Laboratory of Mathematical Methods of Image Processing affiliation Prof. Andrey S. Krylov supervisor 5.0 of 5 **GPA** 

Development of combined image enhancement methods thesis

1998–2008 **Secondary general education**, Gymnasium №26, Naberezhnye Chelny, Russia mathematics and physics focus

> **GPA** 5.0 of 5

Golang, Python, TypeScript, Java, C/C++, Bash, SQL, Matlab, Factor programming languages

cloud infrastructure AWS, Kubernetes, Docker, Helm, ArgoCD, HashiCorp Vault

data processing Apache Kafka, Apache Spark, Apache Hadoop/Hive, Grafana, Prometheus

databases Amazon DocumentDB, Amazon Keyspaces, PostgreSQL, Redis, RediSearch, Clickhouse,

MongoDB, YDB, Apache Cassandra, Apache HBase libraries React, Effector, NumPy, SciPy, CUDA, OpenGL

Visual Studio Code, Git, GitHub Actions, GitHub Copilot, Vim, IntelliJ IDEA tools

macOS (over 8 years), Fedora (over 1 years), Debian (over 15 years) operating systems

Spoken Languages

Russian Native

Work Experience -

English Proficient (C2)

## since 07/2021 **Zerion**

Responsible for the infrastructure of DeFi portfolio tracking platform zerion.io.

- Designing and maintaining real-time blockchain data processing pipelines for various ecosystems (Ethereum, Solana)
- Developing internal (gRPC) and public (REST) high-load API services
- Implementing integrations with major DeFi protocols Leading development of Zerion DNA and Zerion Rewards projects
- Created a shared Golang library and established best practices and development
- guidelines for the team

position tech lead

remotely

location

location

reliability

#### Responsible for the recommendation engine for e-commerce platform joom.com.

10/2018–06/2021 **Joom** 

Designed and implemented data processing pipelines for marketplace analytics and

- user behavior analysis Improved recommendation feed quality through machine learning algorithms and
- A/B testing frameworks Maintained high-load web services for real-time recommendations serving millions of users
- Led infrastructure migration from AWS EC2 to Docker and Kubernetes for improved scalability
- advertising platform

Contributed to Joom Ads auction mechanics development for the merchant

05/2015–09/2018 **Yandex** 

position | senior machine learning engineer

Moscow, Russia

# Responsible for the recommendation engine for e-commerce platform market.yandex.ru.

Built comprehensive offline data processing systems for marketplace transaction and user behavior data

- Designed historical user data collection system for personalized recommendations and analytics
- Developed and maintained A/B testing framework for recommendation algorithm evaluation Led migration from Hive to YDB for improved data processing performance and
- location | Moscow, Russia

10/2014–12/2014 **Samsung** Responsible for image super-resolution project implementation.

position | machine learning engineer

## Worked on various motion estimation algorithms for video enhancement

location Moscow, Russia

position | software engineer 07/2014–08/2014 Space Research Institute

> Responsible for satellite auroral imaging research. Developed efficient numerical methods for large-scale ground and atmospheric

scattering compensation

Prototyped algorithms in Matlab and implemented production versions in Python location Moscow, Russia

position | research intern

01/2012–02/2012 Responsible for computer vision and GPU computing research projects. Implemented real-time stereo matching algorithms optimized for GPU architecture

Developed Kinect depth map enhancement algorithms using GPU parallel processing

07/2012-10/2012

07/2011-09/2011 **ADSC<sup>2</sup>** 

Researched edge-aware recursive image filtering techniques for real-time applications

Singapore location position junior research assistant

supervisors Dr. Dongbo Min, Dr. Kyle Rupnow References

## Prof. Andrey S. Krylov

🔼 Dr. Dongbo Min

Alex Bashlykov CTO & co-founder at Zerion.

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inbox@zerion.io

kryl@cs.msu.ru

Head of Laboratory of Mathematical Methods of Image Processing at CMC MSU<sup>1</sup>.

Former research scientist at ADSC<sup>2</sup>. Dr. Kyle Rupnow k.rupnow@adsc.com.sg

Former research scientist at ADSC<sup>2</sup>.

**Publications** 

[1] T. Saluev and I. Sitdikov. "Generic properties and a criterion of an operator norm". In: Linear Algebra and Its

Applications 485 (2015), pp. 1–20.

- [2] I. Sitdikov and A. S. Krylov. "Variational image deringing using varying regularization parameter". In: Pattern Recognition and Image Analysis 25.1 (2015), pp. 96–100.
- [4] И. Ситдиков и др. «Параллельная реализация алгоритмов вычисления областей для анализа эффекта

[3] I. Sitdikov and A. S. Krylov. "Locally adaptive image deringing". In: 11th International Conference "Pattern Recognition and Image Analysis: New Information Technologies". Vol. 1. Samara, Russia, 2013, pp. 322–325.

ложного оконтуривания на изображениях». В: Труды 15-й международной конференции «Цифровая обработка сигналов и её применение». Т. 2. Москва, 2013, с. 55—58.

<sup>&</sup>lt;sup>1</sup> Faculty of Computational Mathematics and Cybernetics of Lomonosov Moscow State University

<sup>&</sup>lt;sup>2</sup> Advanced Digital Sciences Center (Singapore)