Iskander Sitdikov

A researcher, mathematician, and software engineer

Kuala Lumpur, Malaysia
+995 511 234 698
thoughteer@proton.me
thoughteer.eth
github.com/thoughteer

Education

2013–2015 **Ph. D. degree (unfinished)**, CMC MSU[1], Moscow, Russia

affiliation	Laboratory of Mathematical Methods of Image Processing
supervisor	Prof. Andrey S. Krylov

2008–2013 **Specialist (M. S.) degree**, CMC MSU[1], Moscow, Russia

field of study	applied mathematics and computer science
specialization	mathematical physics
affiliation	Laboratory of Mathematical Methods of Image Processing
supervisor	Prof. Andrey S. Krylov
GPA	5.0 of 5
thesis	Development of combined image enhancement methods

1998–2008 **Secondary general education**, Gymnasium №26, Naberezhnye Chelny, Russia

focus	mathematics and physics
GPA	5.0 of 5

Skills

programming languages	Golang, Python, TypeScript, Java, C/C++, Bash, SQL, Matlab, Factor
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
tools	Visual Studio Code, Git, GitHub Actions, GitHub Copilot, Vim, IntelliJ IDEA
operating systems	macOS (over 8 years), Fedora (over 1 years), Debian (over 15 years)

Spoken Languages

English	Proficient (C2)
Russian	Native

Work Experience

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

location	remotely
position	tech lead

10/2018–06/2021 **Joom**

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

- ☞ 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
- ☞ Contributed to Joom Ads auction mechanics development for the merchant advertising platform

location	Moscow, Russia
position	senior machine learning engineer

05/2015–09/2018 **Yandex**

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 reliability

location	Moscow, Russia
position	machine learning engineer

10/2014–12/2014 **Samsung**

Responsible for image super-resolution project implementation.

- ☞ 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

07/2011–09/2011 **ADSC[2]**

01/2012–02/2012 Responsible for computer vision and GPU computing research projects.

07/2012–10/2012

- ☞ Implemented real-time stereo matching algorithms optimized for GPU architecture
- ☞ Developed Kinect depth map enhancement algorithms using GPU parallel processing
- ☞ Researched edge-aware recursive image filtering techniques for real-time applications

location	Singapore
position	junior research assistant
supervisors	Dr. Dongbo Min, Dr. Kyle Rupnow

References

- ✍ **Alex Bashlykov** inbox@zerion.io
  CTO & co-founder at Zerion.
- ✍ **Prof. Andrey S. Krylov** kryl@cs.msu.ru
  Head of Laboratory of Mathematical Methods of Image Processing at CMC MSU[1].
- ✍ **Dr. Dongbo Min** dongbo@adsc.com.sg
  Former research scientist at ADSC[2].
- ✍ **Dr. Kyle Rupnow** k.rupnow@adsc.com.sg
  Former research scientist at ADSC[2].

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.

[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.

[4] И. Ситдиков и др. «Параллельная реализация алгоритмов вычисления областей для анализа эффекта ложного оконтуривания на изображениях». В: *Труды 15-й международной конференции «Цифровая обработка сигналов и её применение»*. Т. 2. Москва, 2013, с. 55—58.

[1] Faculty of Computational Mathematics and Cybernetics of Lomonosov Moscow State University

[2] Advanced Digital Sciences Center (Singapore)