

# Denis Kolesnikov

## Curriculum Vitae

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### Research interests

Low-rank representations and model order reduction.  
Matrix and tensor decompositions and optimization methods on riemannian manifolds.  
Partial differential equations and related control theory.

### Education

2006-2012 Specialist in Mathematics (with Honours), Lomonosov Moscow State University  
Dissertation project: Central Limit Theorem for epidemic model on complete weighted graph.

### Employment Experience

2011-2014 QA Engineer, iiko company

### Current position

2014- PhD Student Skolkovo Institute of Science and Technology

### Summary of Skills

- Comprehensive knowledge of numerical linear algebra and probability theory
- Possess excellent knowledge of Python scientific software (NumPy/Scipy/Cython) with strong mathematical background
- Familiar with scripting languages, shell scripting, and software programming
- Possess technical knowledge of software build and testing environment with good communication skills

## Publications

### Refereed research papers

1. Kolesnikov, D. and I. Oseledets (2015). From Low-Rank Approximation to a Rational Krylov Subspace Method for the Lyapunov Equation. *SIAM J. Matrix Anal. Appl.* **36**(4), 1622–1637.

### Unpublished working papers

1. Ovchinnikov, G., D. Kolesnikov, and I. Oseledets (2015). Algebraic reputation model RepRank and its application to spambot detection. *arXiv preprint arXiv:1411.5995*.
2. Kolesnikov, D. and I. Oseledets (2016). Convergence analysis of projected fixed-point iteration on a low-rank matrix manifold. *arXiv preprint arXiv:1604.02111*.