

Alexander Rubtsov

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Born: February 24, 1990—Aktyubinsk, Kazah USSR
Nationality: Russian

Current position

Research Fellow, Laboratory of Theoretical Computer Science
Higher School of Economics - National Research University
Associate Professor, Higher School of Economics - National Research University
Senior Lecturer, Moscow Institute of Physics and Technology

Areas of specialization

Formal languages, automata theory, computational complexity
Web-development, system administration

Appointments held

2014-now Higher School of Economics - National Research University
2012-now Moscow Institute of Physics and Technology
2008-2017 Moscow School №25

Education

2016 CANDIDATE OF SCIENCES (EQUIVALENT TO PH.D.) in discrete mathematics and mathematical cybernetics. Thesis "On regular realizability problem" defended at MIPT (adviser: M. N. Vyalyi).
2013 MASTER OF SCIENCE in applied mathematics and physics. Thesis "On regular realizability problem" defended at MIPT (adviser: M. N. Vyalyi).
2011 BACHELOR OF SCIENCE in applied mathematics and physics. Thesis "On generalized nondeterminism automata model" defended at MIPT (adviser: M. N. Vyalyi).

Grants, honors & awards

2016-now RFBR grant 16-01-00362
2013-now RFBR grant 14-01-00641
2011-2013 RFBR grant 11-01-00398-a

Publications & talks

- 2017 *On Computational Complexity of Set Automata*, joint paper with: M. N. Vyalyi // Developments in Language Theory: 21st International Conference, DLT 2017, Liège, Belgium, August 7-11, 2017, Proceedings. Cham : Springer International Publishing, 2017. P. 332-344
- 2015a *Regular Realizability Problems and Context-Free Languages*, joint paper with: M. N. Vyalyi // Descriptive Complexity of Formal Systems. Vol. 9118. Springer International Publishing, 2015. P. 256-267
- 2015b *On regular realizability problems for context-free languages*, joint paper with: M. N. Vyalyi // Problems of Information Transmission. 2015. Vol. 51, no. 4. P. 349-360
- 2014 *Regular realizability problems and context-free languages* // Abstracts of Reports and other materials of the 7th School "Computer Science Days in Ekaterinburg" (Aug. 23-25, 2014). Ekaterinburg, Russia : Ural University Press, 2014. P. 25-27
- 2012 *Algorithmic Decidability of Automata Behaviour Processing Infinite Words (in Russian)*, joint paper with: M. N. Vyalyi // Discrete Analysis and Operation Research. 2012. Vol. 19, no. 2. P. 3-18

Teaching

- 2014-now HSE: discrete mathematics
- 2012-now MIPT: theory and realization of programming languages
- 2017-now MIPT: Analytic geometry and linear algebra
- 2015-2016 Technosphere/Lomonosov MSU : algorithm and data structures
- 2014-2017 MIPT: calculus
- 2013-2017 MIPT: algorithm and computational models
- 2013-2017 Lomonosov MSU: formal languages and automata theory
- 2008-2017 School №25: mathematics
- 2008-2017 School №25: advanced courses in computer science

Service to the profession

- 2014-now HSE: teaching assistant
- 2012-now MIPT: teaching assistant
- 2008-2016 School №25: teacher of additional courses, system administrator

Service to the community

- 2015-now Statute Committee member of [RCEATCS](#) (Russian Chapter of European Association for Theoretical Computer Science)
- 2014-2017 First year students supervisor at DCAM MIPT

Selected skills in programming languages

C/C++, Ruby/Ruby on Rails.