

Job experience

2015–now **Postdoc researcher**, *Graz University of Technology*, Institute for Computer Graphics and Vision, Group of Prof. Thomas Pock.

Education

2012–2015 **PhD student**, *Taras Shevchenko University of Kyiv*, Faculty of Cybernetics, Applied Mathematics.

2010–2012 **MSc**, *Taras Shevchenko University of Kyiv*, Faculty of Cybernetics, Applied Mathematics.

2006–2010 **BSc**, *Taras Shevchenko University of Kyiv*, Faculty of Cybernetics, Applied Mathematics.

PhD thesis

title *Effective projection methods for variational inequalities and composite optimization problems.*

supervisor Prof. Volodymyr V. Semenov

description The dissertation is dedicated to the development of new algorithms for monotone variational inequalities and some composite minimization problems.

Fields of interests

- Mathematical optimization
- Nonlinear analysis
- Fixed point theory
- Variational inequalities

Publications

- 2016 Yu. Malitsky, Proximal extrapolated gradient methods for variational inequalities, arXiv preprint arXiv:1601.04001
- 2015 Yu. Malitsky, *Projected reflected gradient method for monotone variational inequalities*, SIAM Journal on Optimization, 25(1), 2015, pp. 502–520.
- 2015 Yu. Malitsky, V. Semenov, *A hybrid method without extrapolation step for solving variational inequality problems*, Journal of Global Optimization, 61, 2015, pp. 193–202.
- 2014 Yu. Malitsky, V. Semenov, *A variant of an extragradient algorithm for monotone variational inequalities*, Cybernetics and Systems Analysis, 2(50), 2014, pp. 125–131.
- 2013 Yu. Malitsky, V. Semenov, *A scheme of outer approximation for variational inequalities over the set of fixed point of quasicontractive mapping*, Reports of Academy of Science of Ukraine, 7, 2013, pp. 47–52.

- 2012 Yu. Malitsky, *A fixed point of Lipschitz semigroup of nonexpansive operators*, Journal of Numerical and Applied Mathematics, 1(107) 2012, pp. 35–39.
- 2010 Yu. Malitsky, V. Semenov, *The new theorems of strong convergence of proximal method for the problem of equilibrium programming*, Journal of Numerical and Applied Mathematics, 3(102) 2010, pp. 79–88.

Awards

- 2015 SIAM Student Paper Award for 'Projected reflected gradient method for monotone variational inequalities'

Conferences

- Kyiv, October, 2014 Abstract: *"A Douglas-Rachford method for best approximation pair for two disjoint intersections of closed convex sets"*, VI International Conference 'Calculus and Applied Mathematics' dedicated to Ivan Lyashko.
- Heidelberg, September, 2013 1 Heidelberg Laureate Forum.
- Kyiv, September, 2013 Abstract: *"A Variant of Tseng's Splitting Method for Monotone Inclusion Problem"*, V International Conference 'Calculus and Applied Mathematics' dedicated to Ivan Lyashko.
- Skhidnytsia, May, 2013 Abstract: *"A new extragradient method for variational inequalities"*, with V.Semenov, XXI International Conference 'Problems of Decision Making Under Uncertainties' (PDMU-2013).
- Kyiv, September, 2012 Abstract: *"The approximation of a common fixed point of a finite number of Fejer mappings in Hilbert space"*, V International Conference 'Calculus and Applied Mathematics' dedicated to Ivan Lyashko.
- Yalta, October, 2011 Abstract: *"About proximal algorithm for the equilibrium problem"*, with V.Semenov, XVI International Conference 'Problems of Decision Making Under Uncertainties' (PDMU-2011).
- Kyiv, September, 2009 Abstract: *"To the theory of generalized solution of operator equations"*, with V.Semenov, III International Conference 'Calculus and Applied Mathematics' dedicated to Ivan Lyashko.

Participation at schools

- Austria, 2014 Gene Golub SIAM Summer School 2014. "Simulation, Optimization, and Identification in Solid Mechanics", Linz.
- Czech, 2012 Spring School on Analysis 2012. "Variational Analysis and its Applications", Paseky nad Jizerou.
- Czech, 2011 Spring School on Analysis 2011. "Functional Spaces, Approximation, Inequalities", Paseky nad Jizerou.

Awards in the national and international competitions in mathematics

- 2009 **Silver Medal**, *The 5th Internet Mathematical Olympiad for Students*, Ariel University Center, Israel.
- 2009 **Silver Medal**, *The 4th Internet Mathematical Olympiad for Students*, Ariel University Center, Israel.

- 2008 **Silver Medal**, *Internet Mathematical Olympiad for Students*, Ariel University Center, Israel.
- 2008 **3rd Prize**, *69th William Lowell Putnam Mathematics Competition*, Faculty of Mechanics and Mathematics, Taras Shevchenko National University of Kyiv.
- 2005, 2006 **3rd Prize**, *45th and 46th Ukrainian National Mathematics Competition for high school students*.

Teaching experience

- 2014-2015 Analysis I — Teaching assistant
- 2013-2014 Analysis II — Teaching assistant
- 2006-2014 Olympiad mathematics for high school students

Scholarships and grants

- 2006-2015 Government scholarship
- 2010-2011 Victor Pinchuk Foundation Fellow

Languages

- Ukrainian **native**
- Russian **fluent**
- English **fluent**

Computer skills

- Programming language Python, Wolfram Mathematica

Social activities

- 2009-2015 Member of jury of the Ukrainian Mathematical Olympiad (high-school level).
Training sessions for regional, Ukrainian and International mathematics competitions (high-school level).
Member of the creating and selection problem committee for Ukrainian mathematical competitions (high-school level).
- 2009-2014 Teacher at Summer Math School 'Mudramakitra'.

Personal interests

- Literature
- Mountain hiking
- Volleyball
- Table tennis
- Chess