Nguyen The Vinh



Curriculum Vitae

"I like nice theorems, simple algorithms, and interesting applications" – Yura Malitsky

Personal Data

Born November 21, 1980 at Bac Ninh (Vietnam) Gender Male Citizenship: Vietnam Marital status: married

Address Room 803A6, Department of Mathematics, University of Transport and Communications, 3 Cau Giay Street, Lang Thuong Ward, Dong Da District, Hanoi City, Vietnam

Personal https://thevinhbn.github.io/

Website

ORCID http://orcid.org/0000-0003-3373-1881

Education

- 1998–2002 Hanoi University of Science, Vietnam National University, Bachelor's Degree in Mathematics, majoring in Functional Analysis.
- 2002–2004 **Hanoi University of Science, Vietnam National University**, Master's Degree in Mathematics, working on Nonlinear Analysis under the supervision of Professor Do Hong Tan.
- 2005-2010 Institute of Mathematics, Vietnam Academy of Science and Technology, PhD in Mathematics. Title of PhD Thesis: KKM theory in topological semilattices and applications (Supervisor: Prof. Do Hong Tan).

Teaching Experience

Aug 2005 – Lecturer and Researcher, Department of Mathematics, University of Transport and present Communications, Hanoi, Vietnam.

Teaching interests

Calculus, Numerical Analysis, Fixed Point Theory

Areas of current Interest

- Convex Analysis and Optimization Algorithms
- Compressive Sensing (CS), Signal and Image Restoration
- Stochastic Optimization Methods for Machine Learning
- Equilibrium Problems and Variational Inequalities: Theory and Algorithms
- Fixed Point Theory and Applications

Research grants

Oct 2021 – Member of the Research Project 101.01-2020.09, financed by Vietnam National Oct 2022 Foundation for Science and Technology Development (NAFOSTED).

Project title: Set-valued optimization with vector and set criteria and related topics. **Project Leader: Prof. Pham Huu Sach**.

- March 2017 Member of the Research Project 101.01-2017.08, financed by NAFOSTED.
- March 2019 Project title: Set-valued optimization with vector and set criteria and related topics. **Project Leader: Prof. Pham Huu Sach**.
- March 2015 Member of the Research Project 101.01-2014.17, financed by NAFOSTED.
- March 2017 Project title: Selected topics in the theory of multiobjective optimization problems and vector Ky Fan inequalities. **Project Leader: Prof. Pham Huu Sach**.
- June 2012 Member of the Research Project 101.01-2011.52, financed by Vietnam National June 2014 Foundation for Science and Technology Development (NAFOSTED).

Project title: Set-valued Analysis and Equilibrium Problems. **Project Leader: Prof. Pham Huu Sach**.

Publications

See ORCID http://orcid.org/0000-0003-3373-1881

Articles in ISI Journals

- [1] Nguyen The Vinh and Aviv Gibali, Gradient projection type algorithms for solving equilibrium problems and its applications, Computational and Applied Mathematics, Accepted (29 December 2018, SCIE).
- [2] Duong Viet Thong and Nguyen The Vinh, Inertial methods for fixed point problems and zero point problems of the sum of two monotone mappings, Optimization, Accepted (13-Jan-2019, SCIE).
- [3] Duong Viet Thong, Nguyen The Vinh and Yeol Je Cho, A strong convergence theorem for Tseng's extragradient method for solving variational inequality problems, Optimization Letters, Accepted (08-Jan-2019, SCIE).
- [4] Duong Viet Thong, Nguyen The Vinh and Dang Van Hieu, Accelerated hybrid and shrinking projection methods for variational inequality problems, Optimization, 20 Jan 2019, https://doi.org/10.1080/02331934.2019.1566825 (SCIE).
- [5] Pham Ky Anh, **Nguyen The Vinh** and Vu Tien Dung, A new self-adaptive CQ algorithm with an application to the LASSO problem, Journal of Fixed Point Theory and Applications, November 2018, 20:142 (**SCIE**).
- [6] Pham Ky Anh and Nguyen The Vinh, Self-adaptive gradient projection algorithms for variational inequalities involving non Lipschitz-continuous operators, accepted for publication in Numerical Algorithms, 2018, First Online: 06 August 2018, https://doi.org/10.1007/s11075-018-0578-z
- [7] Aviv Gibali, Dang Thi Mai and Nguyen The Vinh, A new relaxed CQ algorithm for solving split feasibility problems in Hilbert spaces and its applications, Journal of Industrial & Management Optimization, First Online: 21 May 2018, http://aimsciences.org/article/doi/10.3934/jimo.2018080
- [8] Nguyen The Vinh, Prasit Cholamjiak and Suthep Suantai, A new CQ algorithm for solving split feasibility problems in Hilbert spaces, Bulletin of the Malaysian Mathematical Sciences Society, First Online: 03 March 2018, https://doi.org/10.1007/s40840-018-0614-0
- [9] Gábor Kassay, Trinh Ngoc Hai and Nguyen The Vinh, Coupling Popov's algorithm

with subgradient extragradient method for solving equilibrium problems, Journal of Nonlinear and Convex Analysis **19** (2018), 959-986 (**SCIE**).

- [10] Nguyen The Vinh and Pham Thi Hoai, Vector equilibrium problems for multifunctions in topological semilattice spaces, Fixed Point Theory 18 (2017), 741-754 (SCIE).
- [11] Trinh Ngoc Hai and Nguyen The Vinh, Two new splitting algorithms for equilibrium problems, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas (RACSAM) 111 (2017), 1051-1069 (SCIE).
- [12] Nguyen The Vinh and Pham Thi Hoai, Some subgradient extragradient type algorithms for solving split feasibility and fixed point problems, Mathematical Methods in the Applied Sciences **39** (2016), 3808-3823 (SCIE).
- [13] Nguyen The Vinh and Pham Thi Hoai, New results on system of generalized quasi-Ky Fan inequalities with set-valued mappings in topological semilattice spaces, Journal of Systems Science and Complexity 29 (2016), 1585-1595 (SCIE).
- [14] Gábor Kassay, Mihaela Miholca and Nguyen The Vinh, Vector quasi-equilibrium problems for the sum of two multivalued mappings, Journal of Optimization Theory and Applications 169 (2016), 424-442 (SCI).
- [15] Nguyen The Vinh and Pham Thi Hoai, Ky Fan's inequalities for vector-valued multifunctions in topological ordered spaces, Fixed Point Theory 15 (2014), 253-264 (SCIE).
- [16] Nguyen The Vinh, Some further applications of KKM theorem in topological semilattices, The Journal of Nonlinear Science and Applications 5 (2012), 161-173 (SCIE).

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Articles in other journals
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- [1] Nguyen The Vinh and Pham Thi Hoai, New results on set-valued vector equilibrium problems, PanAmerican Mathematical Journal 25 (2015), 35 51 (SCOPUS).
- [2] Nguyen The Vinh, On essential components of the solution set of a generalized Ky Fan inequality, Communications on Applied Nonlinear Analysis 17 (2010), 89-100 (SCOPUS).
- [3] Nguyen The Vinh, Systems of generalized quasi-Ky Fan inequalities and Nash equilibrium points with set-valued maps in topological semilattices, PanAmerican Mathematical Journal 19 (2009), 79-92 (SCOPUS).
- [4] Nguyen The Vinh, Some generalized quasi-Ky Fan inequalities in topological ordered spaces, Vietnam Journal of Mathematics 36 (2008), 437-449 (SCOPUS).
- [5] Nguyen The Vinh, Matching theorems, fixed point theorems and minimax inequalities in topological ordered spaces, Acta Mathematica Vietnamica 30 (2005), 211-224 (SCOPUS).

Participation in conferences

- August 25-28, Mini-Workshop on Equilibrium and Fixed Point Problems: Theory and Algorithms, 2014 VIASM, Hanoi, Vietnam.
- February 4-7, International Workshop on Some Selected Problems in Optimization and Control 2015 Theory, VIASM, Hanoi, Vietnam.
- March 16-20, **6th International Conference on High Performance Scientific Computing**, VIASM, 2015 Hanoi, Vietnam.

Languages

Vietnamese Mother Tongue

English Good