
CONTACT INFORMATION

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AREA OF RESEARCH

- Nonlinear and Variational Analysis
- Optimization and Control Theory

EDUCATION

2011–2016 **Doctor of Philosophy**, *Applied Mathematics*, Wayne State University, Detroit
Thesis Title: *Variational Analysis and Stability in Optimization*
Advisor: Boris Mordukhovich
2011–2014 **Masters of Science**, *Applied Mathematics*, Wayne State University, Detroit
2004–2006 **Masters of Science**, *Applied Mathematics*, Kharazmi (Tarbiat Moallem) University, Tehran, Iran
2000–2004 **Bachelor of Science**, *Applied Mathematics*, Kharazmi (Tarbiat Moallem) University, Tehran, Iran

ACADEMIC POSITIONS

Aug. 2016 **Assistant Professor**, Department of Mathematics, Miami University, Oxford
Sep. 2012–May 2016 **Graduate Teaching Assistant**, Department of Mathematics, Wayne State University, Detroit
May 2010–May 2011 **Resident Researcher**, Institute for Research in Fundamental Sciences, Tehran, Iran
Nov. 2008–July 2009 **Researcher**, Department of Mathematics, Avignon University, France
Jan. 2010–May 2011 **Adjunct Faculty**, Department of Science, Qom University, Qom, Iran

PUBLICATIONS

- 12 **Critical Multipliers in Variational Systems via Second-Order Generalized Differentiation**, *submitted* (2016) (by B. S. Mordukhovich and M. E. Sarabi)
- 11 **Stability Analysis for Composite Optimization Problems and Parametric Variational Systems**, *to appear in J. Optim. Theory Appl.* (by B. S. Mordukhovich and M. E. Sarabi)
- 10 **Generalized differentiation of piecewise linear functions in second-order variational analysis**, *Nonlinear Anal.* 132 (2016), 240-273 (by B. S. Mordukhovich and M. E. Sarabi)

- 9 **Second-order analysis of piecewise linear functions with applications to optimization and stability**, *J. Optim. Theory Appl.* (2016), 1-23 (by B. S. Mordukhovich and M. E. Sarabi)
- 8 **Full stability in second-order cone programming**, *SIAM J. Optim.* 24 (2014), no. 4, 1581-1613 (by B. S. Mordukhovich, J. V. Outrata and M. E. Sarabi)
- 7 **Variational analysis and full stability of optimal solutions to constrained and minimax problems**, *Nonlinear Anal.* 121 (2015), 36-53 (by B. S. Mordukhovich and M. E. Sarabi)
- 6 **Characterizations of full stability in constrained optimization**, *SIAM J. Optim.* 23 (2013), no. 3, 1810-1849 (by B. S. Mordukhovich, R. T. Rockafellar and M. E. Sarabi)
- 5 **Pseudo-Hessian and Taylor's expansion for vector-valued functions**, *Nonlinear Anal.* 72 (2010), no. 3-4, 1938-1948 (by E. Babolian and M. E. Sarabi)
- 4 **Existence of solutions in variational relation problems without convexity**, *J. Math. Anal. Appl.* 364 (2010), no. 2, 544-555 (by D. T. Luc, M. E. Sarabi and A. Soubeyran)
- 3 **Revisiting the gap function of a multicriteria optimization problem**, *Int. J. Comput. Math.* 86 (2009), no. 5, 860-863 (by M. E. Sarabi and M. Soleimani-damaneh)
- 2 **Taylor's expansion for $C^{1,1}$ functions in Asplund spaces**, *Nonlinear Anal.* 71 (2009), no. 11, 5707-5711 (by M. E. Sarabi)
- 1 **Sufficient conditions for nonsmooth r-invexity**, *Numer. Funct. Anal. Optim.* 29 (2008), no. 5-6, 674-686 (by M. Soleimani-damaneh and M. E. Sarabi)

TALKS

- October 2016 **Midwest Optimization Meeting**, Department of Mathematics, Michigan State University
 Title: Newton Method for Prox-regular Functions
- January 2016 **Joint Mathematics Meetings, Special Session on "Set-Valued optimization and Variational Problems with Applications,"** Seattle, WA
 (Invited talk)
 Title: Stability analysis of composite optimization problems with applications to critical multipliers
- October 2015 **Midwest Optimization Meeting**, Department of Mathematics, Loyola University, IL
 Title: Second-order analysis of piecewise linear functions with applications to stability
- July 2015 (Invited talk) **22nd International Symposium on Mathematical Programming, Special Session on "Variational Analysis in Nonsmooth Optimization,"** Pittsburgh University, PA
 Title: Second-order analysis of piecewise linear functions and its applications
- October 2014 **Midwest Optimization Meeting, Department of Mathematics,** Loyola University, IL
 Title: Full Stability of Optimal Solutions to Constrained and Minimax Problems
- May 2014 **Michigan Mathematics Meetings,** University of Michigan-Flint, MI
 Title: Full stability in second-order cone programming
- January 2014 **Joint Mathematics Meetings, Special Session on "Set-Valued optimization and Variational Problems with Applications,"** Baltimore, MD
 (Invited talk)
 Title: Full stability in second-order cone programming
- October 2012 **Midwest Optimization Meeting,** Department of Mathematics, Western Michigan University, MI
 Title: Characterizations of full stability in constrained optimization

May 2009 **Optimization Seminar group**, *Avignon University*, France

Title: Existence of solutions in variational relation problems without convexity

REFEREEING ACTIVITIES

- Reviewer for American Mathematical Society
- Journal of Optimization Letters
- Journal of Optimization Theory and Its Applications
- Set-Valued and Variational Analysis
- SIAM Journal on Optimization
- Journal of Optimization
- Journal of Global Optimization
- Journal of Inequalities and Applications

MEMBERSHIPS

2011-present American Mathematical Society (AMS)

2015-present Society for Industrial and Applied Mathematics (SIAM)

Awards

- January 2016 **Graduate Student Travel Grants to the Joint Mathematics Meetings**, American Mathematical Society
- October 2015 **Graduate Student Travel Grants to the AMS Sectional Meeting**, American Mathematical Society
- July 2015 **Graduate Student Professional Travel Awards**, Wayne State University
- April 2015 **The Karl W. and Helen L. Folley Endowed Mathematics Scholarship**, Wayne State University
- September 2014–
May 2015 **Thomas C. Rumble University Graduate Fellowship**, Wayne State University
- April 2014 **The Karl W. and Helen L. Folley Endowed Mathematics Scholarship**, Wayne State University
- January 2015 **Graduate Student Professional Travel Awards**, Wayne State University
- September 2011–
September 2012 **University Graduate Research Fellowship**, Wayne State University
- November 2008–
July 2009 **Graduate Student Travel Grants**, Ministry of Science, Tehran, Iran

TEACHING EXPERIENCE

- Fall 2016 **Differential Equations**, Department of Mathematics, Miami University
- Fall 2016 **Calculus II**, Department of Mathematics, Miami University
- Fall 2015 **MAT1800 (Elementary Functions)**, Department of Mathematics, Wayne State University
- Spring 2015 **MAT5700 (Introduction to Probability Theory)**, Department of Mathematics, Wayne State University
- Fall 2014–Winter
2015 **Substitute Instructor for Advanced Calculus and Methods of Optimization**, Department of Mathematics, Wayne State University
- Spring 2014 **MAT2210 (Calculus II)**, Department of Mathematics, Wayne State University

Winter 2014 **MAT1050 (Algebra with Trigonometry)**, Department of Mathematics, Wayne State University

Fall 2013 **MAT1050 (Algebra with Trigonometry)**, Department of Mathematics, Wayne State University

Spring 2013 **MAT1800 (Elementary Functions)**, Department of Mathematics, Wayne State University

Winter 2013 **MAT1800 (Elementary Functions)**, Department of Mathematics, Wayne State University

Fall 2013 **MAT1800 (Elementary Functions)**, Department of Mathematics, Wayne State University

January 2010-
May 2011 **Calculus I, II, III, and Set Theory**, Department of Science, Qom University, Qom, Iran