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Zhang, Zaikun

F 325, ENSEEIHT, 2 rue Camichel 31071 Toulouse CEDEX 7, France ↑ http://www.zzk.me ⋈ zhang@cerfacs.fr

Basic Information

Date of birth Aug. 1985

Place of birth Shandong Province, China

Gender Male

Nationality Chinese

Education

Sept. 2007–July 2012 Ph.D., computational mathematics, Institute of Computational Mathematics and

Scientific/Engineering Computing, Chinese Academy of Sciences, China, supervised by Professor Ya-xiang Yuan, thesis: On derivative-free optimization methods

May 2010-Aug. 2010 Visiting student, Institute for Computer Science, University of Bayreuth, Germany,

visiting Professor Klaus Schittkowski, funded by Alexander von Humboldt Foundation

Sept. 2003–July 2007 B.Sc., computational mathematics, College of Mathematics, Jilin University, China

Positions

Apr. 2014-present

postdoc, CERFACS-IRIT joint lab on computational applied mathematics, France, in the team of Professor Serge Gratton, funded by Fondation STAE

Sept. 2012-Apr. 2014

postdoc, Department of Mathematics, University of Coimbra, Portugal, in the group of Professor Luís Nunes Vicente, funded by FCT grant PTDC/MAT/116736/2010

Research Interests

Nonlinear optimization and its applications, derivative-free optimization

Publication

[1] Z. Zhang, Sobolev seminorm of quadratic functions with applications to derivative-free optimization, Math. Program., 146(1-2): 77–96, 2014 (based on Sections 4.3–4.5 of Ph.D. thesis)

Working Papers

[1] S. Gratton, C. W. Royer, L. N. Vicente, Z. Zhang, Direct search based on probabilistic descent, preprint 14-11, Dept. Mathematics, Univ. Coimbra, submitted

[2] Z. Zhang, A derivative-free optimization algorithm with low-dimensional subspace techniques for large-scale problems, in preparation (based on Section 5.3 of Ph.D. thesis)

[3] S. Gratton, L. N. Vicente, Z. Zhang, A subspace decomposition framework for nonlinear optimization: Global convergence and global rates, in preparation

Selected Conference Presentations

- July 28, 2014 Optimization 2014 (Guimarães, Portugal), A subspace decomposition framework for nonlinear optimization: Global convergence and global rates, organized-session talk
- July 17, 2014 The 20th Conference of the International Federation of Operational Research Societies (IFORS, Barcelona, Spain), Direct search based on probabilistic descent, organized-session talk
- May 22, 2014 SIAM Conference on Optimization 2014 (SIOPT, San Diego, US), Direct search based on probabilistic descen, mini-symposium talk
- July 29, 2013 The Fourth International Conference on Continuous Optimization (ICCOPT, Lisbon, Portugal), A derivative-free optimization algorithm with low-dimensional subspace techniques for large-scale problems, organized-session talk

Selected Awards

- 2012 Pacemaker Award to Outstanding Students, awarded by Chinese Academy of Sciences
- 2010, 2011 Outstanding Student Awards, awarded by Chinese Academy of Sciences
 - 2007 Outstanding Graduate Award, awarded by Jilin University
- 2004, 2005, 2006 First Class Scholarships, awarded by Jilin University
 - 2004 National Scholarship, awarded by the Ministry of Education of China

Organization of Events and Participation in Boards

- 2013 Member of the Organizing Committee of The Fourth International Conference on Continuous Optimization (ICCOPT, July 27–Aug. 1, 2013, Lisbon, Portugal)
- 2011–2012 Founding president of SIAM Student Chapter at Chinese Academy of Sciences (the first SIAM Student Chapter in East Asia)
 - 2011 Secretary of The Fifth Sino-Japan Optimization Meeting (SJOM, Sept. 26–29, 2011, Beijing, China)

Refereeing

SIAM Journal on Optimization, Science China Mathematics, Optimization Methods and Software, Computational Optimization and Applications, Applied Mathematics and Computation, Optimization and Engineering

Membership

Sept. 2012–Aug. 2014 Numerical Analysis and Optimization Group, the Centre for Mathematics of University of Coimbra (CMUC)

Computer Skills

Linux; Fortran, C, Matlab

Language Skills

Native Chinese, fluent English