张在坤
Zhang, Zaikun

Department of Mathematics, Faculty of Science and Technology, University of Coimbra
3001-501 Coimbra, Portugal
http://www.zhangzk.net
+351 239 793 061
zhang@mat.uc.pt

Basic Information

Date of birth **Aug. 1985**.
Place of birth **Shandong Province, China**.
Gender **Male**.
Nationality **Chinese**.

Education

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

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. 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.

Position

Sept. 2012–present **Department of Mathematics, University of Coimbra**, postdoctoral researcher, funded by FCT grant PTDC/MAT/116736/2010 (PI: Professor Luís Nunes Vicente).

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, *Mathematical Programming*, to appear, DOI: 10.1007/s10107-013-0679-3 (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, 2013.

[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

Sept. 26, 2011 **The Fifth Sino-Japan Optimization Meeting (Beijing, China)**, Sobolev seminorm of quadratic functions with applications to derivative-free optimization, contributed talk.

July 25, 2013 **Recent Advances on Optimization (Toulouse, France, dedicated to Ph. Toint's 60th birthday)**, A subspace decomposition framework for nonlinear optimization: Global convergence and global rates, contributed 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, invited by J. Larson.

Selected Awards

2004 **National Scholarship**, awarded by the Ministry of Education of China.

2004, 2005, 2006 **First Class Scholarships**, awarded by the Jilin University.

2007 **Outstanding Graduate Award**, awarded by the Jilin University.

2010, 2011 **Outstanding Student Awards**, awarded by the Chinese Academy of Sciences.

2010, 2012 **Yong-An Scholarship, Ge-Lin Scholarship**, awarded by the Academy of Mathematics and Systems Science, Chinese Academy of Sciences.

2012 **Pacemaker Award to Outstanding Students**, awarded by the Chinese Academy of Sciences.

Organization of Events and Participation in Boards

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)**.

2013 **Member of the Organizing Committee of The Fourth International Conference on Continuous Optimization (ICCOPT, July 27–Aug. 1, 2013, Lisbon, Portugal)**.

Refereeing

SIAM Journal on Optimization, Optimization Methods and Software, Computational Optimization and Applications, Applied Mathematics and Computation.

Membership

Sept. 2012–present **Numerical Analysis and Optimization Group of the Centre for Mathematics of the University of Coimbra (CMUC)**.

Feb. 2014–present **Society for Industrial and Applied Mathematics (SIAM) and SIAM Activity Group on Optimization (SIAG/OPT)**.

Computer Skills

Linux; Fortran, C, Matlab.

Language Skills

Native Chinese, fluent English, basic Portuguese.