Yu GUAN

Curriculum Vitae

Personal Information

E-mail	ricky7guanyu@gmail.com
Cell Phone	(32)483619612
Address	1348 Louvain-la-Neuve, Belgium

Education

Jan 2019–Present	**Postdoctor**, *ICTEAM Institute*, Université Catholique de Louvain.
Aug 2018–Dec 2018	**Research Assistant**, *Department of Mathematics*, Faculty of Science, National University of Singapore.
Aug 2014–Aug 2018	**Ph.D. in Computational Mathematics**, *Department of Mathematics*, Faculty of Science, National University of Singapore.
Sep 2011–July 2014	**M.S. in Mathematics**, *Department of Mathematics*, Faculty of Science, Shanghai University.
July 2007–July 2011	**B.S. in Mathematics and Applied Mathematics**, *Department of Mathematics*, Faculty of Science, Shanghai University.

Awards/Honors/Scholarships

2009	**Academic Scholarship**, *Shanghai University*.
2009	**Certification of Middle-level Skills of Computer Operation**.
2013	**National Scholarship**, *awarded by Ministry of Education of China (Top 3)*.
2014–2018	**NUS Research Scholarship**, *National University of Singapore*.
2019–Present	**UCLouvain Postdoctoral Fellowship**, *Université Catholique de Louvain*.

Research Publications

- ⬥ **(Yu Guan, Zhaojia Tong)**, *The minus partial ordering equations over von Neumann regular rings*, Open Math 13 (2015), 229–238.
- ⬥ **(Yu Guan, Moody T. Chu, and Delin Chu)**, *SVD-based algorithms for the best rank-1 approximation of a symmetric tensor*, SIAM J. Matrix Anal. Appl., 39 (2018), pp. 1095–1115.
- ⬥ **(Yu Guan, Moody T. Chu, and Delin Chu)**, *Convergence Analysis of an SVD-based Algorithm for the Best Rank-1 Tensor Approximation*, Linear Algebra Appl., 555 (2018), pp. 53–69.
- ⬥ **(Yu Guan, Delin Chu)**, *Numerical Computation for Orthogonal Low Rank Approximation of Tensors*, SIAM J. Matrix Anal. Appl., 40 (2019), PP. 1047–1065.

- ♦ **(Yu Guan, Nan Jiang, Bo Dong and Moody T. Chu)**, *Convergence Analysis of Alternating Direction Methods: A General Framework and Its Applications to Tensor Approximations*, submitted.
- ♦ **(Yu Guan, Nan Jiang, Bo Dong and Moody T. Chu)**, *A Theoretical Consideration of Matrix-operative Alternating Least Squares Methods for Orthogonal CP Tensor Approximation*, submitted.
- ♦ **(Yu Guan)**, *Global Convergent Symmetric Jacobi Algorithm for the Best Tucker Nearest Problem of Symmetric Tensors*, in preperation.
- ♦ **(Yu Guan, Shuyu Dong, Pierre-Antoine.Absil and Francois Glineur)**, *Alternating Minimization Algorithms for Theoretical Consideration of Graph Regularized Tensor Completion*, in preperation.

Research Experience

May 2009	**Mathematical Modeling Competitions**, *Topic: Elevator operation management program design.*
May 2010	**Mathematical Modeling Competitions**, *Topic: Analyzing the prospect of coming talents after the expo in Shanghai .*
Aug 2009–Aug 2010	**Research Assistant, Department of Mathematics,**, *Project: Research on modeling of hydatidosis' infectious diseases, Shanghai University and Fudan University.*
Oct 2010–May 2014	**Discussion Groups**, *The solutions of matrix equations and eigenvalue problems, department of mathematics, Shanghai University.*
May 2009–May 2010	**Discussion Groups**, *Some topics on finance and statistics, schools of finance and statistics, East China Normal University.*
May 2011–May 2014	**Discussion Groups**, *Some topics on number theory, department of mathematics, Shanghai University.*
Aug 2014–Dec 2018	**Discussion Groups**, *Some researches on big data and optimization of some algorithms, department of mathematics, National University of Singapore.*
July 2017–Dec 2017	**Visiting Scholar**, *Various tensor problems and decompositions, North Carolina State University.*
Jan 2019–present	**Discussion Groups**, *Tensor completion problem using optimality algorithms, ICTEAM, Université Catholique de Louvain.*

Working Experience

Sep 2010–May 2011	**Di'an Software Company, Shanghai**, *Intern, data analyst,*
	• Collected data, synthesized model for achieving better satisfaction.
	• Assumed some parameters in the final model and used some optimality functions.
	• Analyzed the stability of model.
	• Enhanced the accuracy of the results. .

Miscellaneous

- ♦ **Language**, *English (Fluent), Mandrain Chinese (Native), French (very little (A1 Level)).*
- ♦ **Skills**, *Matlab (Proficient), Python (Basic), Premiere (Basic).*