

Jianqing Jia

Department of Mathematics, Syracuse University
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RESEARCH INTERESTS

Optimization, Augmented Reality, Computer Vision, Machine Learning

EDUCATION

Ph.D. candidate, Applied Mathematics, Syracuse University

- Research topic: Optimization and machine learning
- Advisor: Professor Lixin Shen

M.S., Computational Mathematics, Hebei Normal University & Temple University

- Research topic: Augmented reality, wavelet analysis and image processing
- Thesis: “Image-driven Label Placement for Augmented Reality”
- Advisors: Professor Wei Guo (Math) & Professor Haibin Ling (Computer science)

B.S., Mathematics, Hebei Normal University

- Recommended for Master’s program admission, GPA: 3.69/4, Rank: 1/110

PUBLICATIONS

Google Scholar profile: <https://scholar.google.com/citations?hl=en&user=3Crep68AAAAJ>

Journal Articles

- [1] Semir Elezovikj, Jianqing Jia, Chiu C Tan, and Haibin Ling, “PartLabeling: A Label Management Framework in 3D Space.” *The Visual Computer*, 2022, in press.
- [2] Jianqing Jia, Semir Elezovikj, Heng Fan, Shuojin Yang, Jing Liu, Wei Guo, Chiu C Tan, and Haibin Ling, “Semantic-aware label placement for augmented reality in street view.” *The Visual Computer*, 37(7):1805-1819, Springer Berlin Heidelberg, 2021.
- [3] Jing Liu, Shuojin Yang, Liang Tian, Wei Guo, Bingyin Zhou, Jianqing Jia, and Haibin Ling, “Multi-component fusion network for small object detection in remote sensing images.” *IEEE Access*, 7:128339-128352, IEEE, 2019.

Conference Article

- [4] Jianqing Jia, Yu Zhang, Xiaoce Wu, and Wei Guo, “Image-based label placement for augmented reality browsers.” *2018 IEEE 4th International Conference on Computer and Communications (ICCC)*, pp. 1654-1659, IEEE, 2018

HONORS AND AWARDS

- Excellent Master’s thesis in Hebei Province (award rate 0.6%), 2020
- National Scholarship (graduate level), 2018
- The 2nd Prize in 14th National Mathematical Contest in Modeling for Graduates, 2017
- First-Class Graduate Academic Scholarship (2 times), 2016–2018
- Excellent Undergraduate Student of Hebei Province, 2015
- The 2nd Prize in 13th National English Public Speaking Contest, 2013

EMPLOYMENT HISTORY

- Teaching Assistant, Syracuse University Syracuse, NY USA, 2019–now
- Research Assistant, Syracuse University Syracuse, NY USA, 2019–now
- Research Assistant, Temple University Philadelphia, PA USA, 2018–2019
Department of Computer and Information Sciences
- Teaching Assistant, Hebei Normal University Shijiazhuang, Hebei China, 2017–2018
- Lecturer, Hebei College of International Education Shijiazhuang, Hebei China, 2016–2018
- College Counselor, Hebei Normal University Shijiazhuang, Hebei China, 2015–2016

FUNDINGS AND SCHOLARSHIPS

- Research Assistantship, 2019–2022, NSF research grant #1913039
Sparse Optimization in Large Scale Data Processing: A Multiscale Proximity Approach
- Research Assistantship, 2020–2022, NSF research grant #1818833
Fast Algorithms for Simulating the Collective Swimming of Microorganisms
- Member, 2018, National Natural Science Foundation of China (NSFC) #11826013
Conference on mathematical culture communication in the internet age
- Principal Investigator, 2017-2019, Innovation research grant for Graduates #CXZZSS2018059
Image-based label placement for augmented reality browsers
- Member, 2019-2021, National Natural Science Foundation of China (NSFC) #61802109
Information fusion-based depth estimation and virtual view synthesis in true 3D volumetric display

TEACHING

Instructor of Record

Syracuse University

- MAT 222 *Elementary Probability and Statistics II* Spring 2022
- MAT 284 *Business Calculus* Summer 2021
- MAT 285 *Life Sciences Calculus I* Fall 2021
- MAT 286 *Life Sciences Calculus II* Spring 2021

Hebei College of International Education

- MAT 141 *Pre-Calculus* Summer 2016
- MAT 151 *Calculus I* Fall 2016
- MAT 202 *Business Calculus I* Spring 2017
- *GRE Math* Spring 2018

Teaching Assistant

Syracuse University

- MAT 121 *Probability and Statistics for the Liberal Arts I* Fall 2019, Fall 2020
- MAT 122 *Probability and Statistics for the Liberal Arts II* Spring 2020

Hebei Normal University

- *Advanced Algebra II* Fall 2017
- *Analytic Geometry* Spring 2018

SKILLS

Mathematical and Statistical skills

- Mathematics: Numerical Analysis, Numerical Optimization, Numerical Linear Algebra
- Statistics: Linear Models, Bayesian Inference, Stochastic Processes, Ranking and Selection

Computational Skills

- Programming language: Matlab, R, Python, C

PROFESSIONAL MEMBERSHIPS

- American Mathematical Society, 2019 – now
- Mathematical Association of America, 2019 – now

REFERENCES

Available upon request.

- Ph.D. Advisor: Lixin Shen
Professor, Mathematics Department, Syracuse University
Email: lshen03@syr.edu
- M.S. Advisor: Haibin Ling
Empire Innovation Professor, Department of Computer Science, Stony Brook University
Email: hling@cs.stonybrook.edu
- Pinyuen Chen
Professor, Director of Statistics Program, College of Arts and Science, Syracuse University
Email: pinchen@syr.edu