Personal Data

Contact

Name Xiaosheng ZHUANG

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Research Interests

Applied and Computational Harmonic Analysis;

Sparse Approximation;

Directional Multiscale Representation Systems;

Compressed Sensing;

Image/Signal Processing;

Machine Learning and Pattern Recognition.

Educational Background

2005.09 - 2010.07	Ph.D. in Applied Mathematics
	University of Alberta, Canada; Supervisor: Bin Han
2003.09 - 2005.07	M.Sc. in Mathematics and Applied Mathematics
	Sun Yat-sen University, China
1999.09 - 2003.07	B.Sc. in Mathematics and Applied Mathematics
	Minor in Computer Science
	Sun Yat-sen University, China

Employment History

2012.12 – Present	Assistant Professor, City University of Hong Kong, Hong Kong
2012.07 - 2012.12	PIMS & MITAC PDF, University of Alberta, Canada
2011.10 - 2012.06	PDF, Technical University of Berlin, Germany
2010.09 - 2011.09	PDF, University of Osnabrueck, Germany
2005.09 - 2010.07	Research Assistant, University of Alberta, Canada
2010.07 - 2010.08	Summer Term Instructor, University of Alberta, Canada
2005.09 - 2010.04	Teaching Assistant, University of Alberta, Canada
2003.09 - 2005.07	Research Assistant, Sun Yat-sen University, China

CURRICULUM VITAE

Xiaosheng Zhuang

Honors and Awards	
2013.07	Eearly Career Award, 2013/2014, RGC, Hong Kong
2012.06	Oberwolfach Leibniz Graduate Student, Oberwolfach, Germany
2009.09	Eoin L Whitney Scholarship, University of Alberta
2008.12	Dr. Josephine Mitchell Graduate Research Prize, University of Alberta
2006.09	Provost Doctoral Entrance Award, University of Alberta
	Josephine Mitchell Scholarship, University of Alberta
2005.09	Provost Doctoral Entrance Award, University of Alberta
2002.09	1st Class Scholarship, Sun Yat-Sen University
	Lenovo Scholarship, Sun Yat-Sen University
2001.09	3rd Class Scholarship, Sun Yat-Sen University
2000.09	2nd Class Scholarship, Sun Yat-Sen University
	J.C. Hu & S.Q. Xu Memorial Scholarship, Sun Yat-Sen University

Teaching

2017.09 - 2017.12	MA2001 (Multivariate Calculus and Linear Algebra), CityU
2017.01 - 2017.05	MA2001 (Multivariate Calculus and Linear Algebra), CityU
2016.09 - 2016.12	MA2001 (Multivariate Calculus and Linear Algebra) and
	MA4542 (Real Analysis), CityU
2016.01 - 2016.05	MA2001 (Multivariate Calculus and Linear Algebra) and
	MA3001 (Differential Equations), CityU
2015.09 - 2015.12	MA2001 (Multivariate Calculus and Linear Algebra) and
	MA3522 (Analysis), CityU
2015.01 - 2015.05	MA2001 Lecturer (Multivariate Calculus and Linear Algebra), CityU
2014.09 - 2014.12	MA2001 Lecturer (Multivariate Calculus and Linear Algebra)
	MA4542 Lecturer (Real Analysis), CityU
2014.01 - 2014.05	MA2001/MA2170 Lecturer (Multivariate Calculus and Linear Algebra), CityU
2013.09 - 2013.12	MA2001 Lecturer (Multivariate Calculus and Linear Algebra),
	MA4542 Lecturer (Real Analysis), CityU
2013.01 - 2013.05	MA2149 Lecturer (Mathematical Analysis), CityU
2010.07 - 2010.08	Math 113 Lecturer (Elementary Calculus), University of Alberta
2010.01 - 2010.04	Math 102 Lab Instructor (Linear Algebra), University of Alberta
2009.09 - 2009.12	Math 113 Lab Instructor (Elementary Calculus), University of Alberta
	Math 381 Lab Instructor (Numerical Analysis), University of Alberta
2009.01 - 2009.04	Math 113 Lab Instructor (Elementary Calculus), University of Alberta
2008.09 - 2008.12	Math 113 Lab Instructor (Elementary Calculus), University of Alberta

Grants

External Grants

No.	Approval	Project Title	Duration	PI	Funding
	Date		(Months)		Source
1	2017.07.01	Dual Framelets on Manifolds and Graphs with Applications	24	YES	GRF
		in Multiscale Data Analysis			
2	2014.07.01	On the Design and Applications of Multidimensional	42	YES	GRF
		Subdivision Schemes and Directional FIR Filter Banks			
3	2013.07.01	Directional Multiscale Representation Systems: Theory,	42	YES	GRF
		Design, and Applications			

Internal Grants

No.	Approval	Project Title	Duration	PI	Funding
	Date		(Months)		Source
1	2015.09.01	Directional Multscale Representation Systems with Low	24	YES	CityU
		Redundancy Rate and Their Applications in			SRG
		High-Dimensional Data Analysis			
2	2015.05.22	Directional Multiscale Representation Systems in Manifold	30	YES	CityU
		Learning			StUp

Publication List

A. Articles Published or Accepted in Refereed Journals

- 1. Han, B., Jiang, Q. T., Shen, Z. W., and **Zhuang, X.** (2018.01) Symmetric canonical quincunx tight framelets with high vanishing moments and smoothness. *Mathematics of Computation*, 87 (309):347-379.
- 2. Chui, C. K., Mhaskar, H. N., and Zhuang, X. (2018.01) Representation of functions on big data associated with directed graphs. *Applied and Computational Harmonic Analysis*, 44 (1):165-188.
- 3. **Zhuang, X.** (2017.07) Quincunx fundamental refinable functions in arbitrary dimensions. *Axiom*, 6 (3):20.
- 4. **Zhuang, X.** (2016.09) Digital affine shear transforms: fast realization and applications in image/video processing. *SIAM Journal on Imaging Sciences*, 9 (3):1437-1466.
- 5. Han, B., Zhao, Z., and **Zhuang, X.** (2016.09) Directional tensor product complex tight framelets with low redundancy. *Applied and Computational Harmonic Analysis*, 41 (2): 603-637.
- 6. Chui, C. K., De Villiers, J., and Zhuang, X. (2016.07) Multirate systems with shortest spline-wavelet filters. *Applied and Computational Harmonic Analysis*, 41 (1): 266-296.
- 7. Han, B. and **Zhuang, X.** (2015.09) Smooth affine shear tight frames with MRA structures, *Applied and Computational Harmonic Analysis*, 39 (2): 300-338.
- 8. Bodmann, B. G., Kutyniok, G., and **Zhuang**, X. (2015.01) Gabor shearlets, *Applied and Computational Harmonic Analysis*, 38 (1):87-114.
- 9. Tan, C. and **Zhuang X.** (2014.06) The common Hardy space and BMO space for singular integral operators associated with isotropic and anisotropic homogeneity, *Journal of Mathematical Analysis and Applications*. 414: 480-487.
- 10. King, E. J., Kutyniok, G., and **Zhuang**, X. (2014.02) Analysis of inpainting via clustered sparsity and microlocal analysis, *Journal of Mathematical Imaging and Vision*. 48 (2): 205-234.
- 11. Han, B. and **Zhuang, X.** (2013.01) Algorithms for matrix extension and orthogonal wavelet filter banks over algebraic number fields. *Mathematics of Computation*. 82 (281): 459-490.
- 12. Specktor, S. and **Zhuang, X.** (2012) Asymptotic Bernstein type inequalities and estimation of wavelet coefficients. Methods and Applications of Analysis. 19 (3): 289-312
- 13. Kutyniok, G., Shaharm, M., and **Zhuang, X.** (2012) ShearLab: A rational design of a digital parabolic scaling algorithm. *SIAM Journal on Imaging Sciences*. 5 (4):1291-1332.
- 14. Mo, Q. and **Zhuang** X. (2012) Matrix splitting with symmetry and dyadic framelet filter banks over algebraic number fields, *Linear Algebra and its Applications*. 437 (10): 2650-2679.
- 15. **Zhuang, X.** (2012) Matrix extension with symmetry and construction of biorthogonal multiwavelets with any integer dilation. *Applied and Computational Harmonic Analysis*. 33 (2): 159-181.
- 16. Chui, C. K., Han, B. and **Zhuang, X.** (2012) A dual-chain approach for bottom-up construction of wavelet filters with any dilation. *Applied Computational Harmonic Analysis*. 33 (2): 204-225.
- 17. Han, B. and **Zhuang, X.** (2010) Matrix extension with symmetry and its applications to symmetric orthonormal multiwavelets. *SIAM Journal on Mathematical Analysis*. 42 (5): 2297-2317.
- 18. Han, B. and **Zhuang, X.** (2009) Analysis and construction of Multivariate interpolating refinable function vectors. *Acta Applicandae Mathematicae*. 107:143-171.
- 19. Han, B., Kwon, S. G. and **Zhuang, X.** (2009) Generalized interpolating refinable function vectors. *Journal of Computational and Applied Mathematics*. 227:254-270.
- 20. **Zhuang X.** and Dai, D. Q. (2007) Improved discriminate analysis for high dimensional data and its application to face recognition. *Pattern Recognition*. 40: 1570-1578.

- 21. **Zhuang X.**, Dai, D. Q. and Yuen, P. C. (2005) Face recognition by inverse Fisher discriminant features. *Lecture notes in Computer Science*. 3832:92-98.
- 22. **Zhuang X.** and Dai, D. Q. (2005) Inverse Fisher discriminate criteria for small sample size problem and its application to face recognition. *Pattern Recognition*. 38: 2129-2194.

B. Book Chapters

Kutyniok, G., Lim, W.-Q., and Zhuang, X. (2011) Digital Shearlet Transforms, book chapter in "Shearlets:
 Multiscale Analysis for Multivariate Data".

C. Other Refereed Contributions

- 1. Che Z. and **Zhuang, X.** (2017) Affine shear tight frames with two-layer structure. *Wavelets and Sparsity XVII, SPIE Proc.* 10394-22.
- 2. Che Z. and **Zhuang, X.** (2017) Digital Affine Shear Filter Banks with 2-Layer Structure. 2017 International Conference on Sampling Theory and Applications (SampTA), Tallinn, Estonia. 575-579.
- 3. **Zhuang, X.** (2015) Smooth affine shear tight frames: digitization and applications. *Wavelets and Sparsity XVI, SPIE Proc.* 9597.
- 4. Bodmann, B. G., Kutyniok, G., and **Zhuang, X.** (2011) Coarse quantization with the fast digital shearlet transform. *Wavelet XI, San Diego, CA, SPIE Proc.* (8318).
- 5. King, E. J., Kutyniok, G., and **Zhuang, X.** (2011) Analysis of data separation and recovery problems using clustered sparsity. *Wavelet XI, San Diego, CA, SPIE Proc.* (8318).
- 6. Donoho, D. L., Kutyniok, G., Shahram, M., and **Zhuang, X.** (2011) A rational design of a digital shearlet transform. *The 9th International Conference on Sampling Theory and Applications*, Singapore.
- 7. **Zhuang, X.** (2011) The digital shearlet transform on pseudo-polar grids. *Oberwolfach Report* 17/2011: 29-32.
- 8. **Zhuang, X.** (2011) Interpolating refinable function vectors and matrix extension with symmetry. *Oberwolfach Report* 44/2010: 35-37.
- 9. **Zhuang, X.** (2010) Matrix extension with symmetry and its applications. in *Approximation Theory XIII:* San Antonio 2010, M. Neamtu and L.L. Schumaker eds. Springer, 2012.

D. Manuscripts and Submitted

- 1. Wang Y.G. and Zhuang X. (2017) Tight Framelets on Graphs and Their Applications. Manuscript.
- 2. Han B., Mo Q., Zhao Z., and Zhuang X. (2017) Compactly Supported Directional Tensor Product Complex Tight Framelets with Applications to Image Processing, Preprint
- 3. Han B., Li T., and Zhuang X. (2017) Directional Compactly Supported Box Spline Tight Framelets with Simple Structure, arXiv:1708.08421.
- 4. Che Z., and Zhuang, X. (2017) Digital affine shear filter banks with 2-layer structure and their applications in image processing, TIP, submitted
- 5. Dyn, N., and Zhuang, X. (2017) Linear multiscale transforms based on even-reversible subdivision operators, arXiv:1710.10783.
- **6.** Wang, Y.G., and Zhuang, X. (2017) Tight framelets and fast framelet transforms on manifolds, arXiv:1608.04026.

Journal Editor and Referee

Associate Editor:

- Multidimensional Systems and Signal Processing

Review Editor:

Frontiers in Applied Mathematics and Statistics,
 Mathematics of Computation and Data Science

Referee for Journals and Others:

- Acta Applicandae Mathematicae
- Advances in Computational Mathematics
- Applied Computational Harmonic Analysis
- Analysis and Applications
- Biomedical Signal Processing and Control
- Constructive Approximation
- IEEE Transaction on Information Theory
- International Journal of Numerical Analysis and Modeling, Series B
- International Journal of Wavelets, Multiresolution and Information Processing
- Journal of Approximation Theory
- Journal of Computational and Applied Mathematics
- Journal of Fourier Analysis and Applications
- Journal of Machine Learning Research
- Journal of Mathematical Analysis and Applications
- Journal of Mathematical Imaging and Vision
- Lecture Notes in Computer Sciences
- Neural Processing Letters
- Numerical Mathematics: Theory, Methods, and Applications
- Optica Applicata
- Proceeding of the 9th International Conference on Sampling Theory and Applications
- SCIENCE CHINA Mathematics
- SIAM Journal on Mathematical Analysis
- Zentralblatt MATH

Organizing Activities

2018.06	SIAM Conference on Imaging Sciences 2018, Bologna, Italy,
	Minisymposium: Framelets, Optimization, and Image Processing,
	Organizer
2016.06	International Conference on Applied Mathematics,
	City University of Hong Kong, Hong Kong.
	Organizer
2016.05	15th International Conference on Approximation Theory, San Antonio, USA
	Minisymposium: Sparse Approximation and Mathematical Imaging
	Organizer
2014.12	The 5th International Conference on Scientific Computing and Partial Differential Equations,
	Hong Kong Baptist University, Hong Kong
	Minisymposium: Applied Harmonic Analysis and Sparse Approximation,
	Organizer
2014.05	SIAM Conference on Imaging Sciences 2014, Hong Kong Baptist University, Hong Kong
	Minisymposium: Directional Multiscale Representation Systems and Mathematical Imaging,
	Organizer
2007.05	"Student Seminar" in Summer School and Workshops on Mathematical Imaging and Digital Media,
	National University of Singapore, Singapore.
	Organizer

Invited and Plenary Talks

Plenary Speaker

2014

2014.12 International Workshop on Wavelets, Frames and Applications – II Dec 24-30,2014. University of Delhi, India

Invited Presentations

2018	
2018.06	Minisymposium: Framelets, Optimization, and Image Processing in
	SIAM Conference on Imaging Science, Bologna, Italy.
2018.03	Fast Algorithms for Generating Static and Dynamically Changing Point Configurations, in ICERM
	Semester Program on "Point Configurations in Geometry, Physics and Computer Science",
	Brown University, Providence, RI, USA
2017	
2017.12	From Approximation Theory to Real-World Applications, Tsinghua Sanya International Mathematics
	Forum (TSIMF), Sanya, China
2017.10	CityU-TAU Joint Workshop, Tel-Aviv University, Israel
2017.09	Workshop on Mathematics for Data Sciences, Sun Yat-sen University, Zhuhai, China
2017.08	Wavelets and Sparsity XVII, SPIE Optical Engineering + Applications, San Diego, USA
2017.06	Joint Workshop on Mathematics and Applications, Wuhan University, Wuhan, China
2017.06	Workshop on Computational Harmonic Analysis, NanKai University, Tianjin, China
2017.05	International Conference of Kernel-Based Approximation Methods in Machine Learning, South China
	Normal University, Guangzhou, China
2017.03	1st International Conference on Mathematics of Data Science, Baptist Univ., Hong Kong
2017.03	2 nd IM-Workshop on Applied Approximation, Signals and Images, Bernried, Germany
2017.02	7 th Workshop on High-Dimensional Approximation, University of New South Wales, Sydney,
	Australia
2016	
2016.12	2016 International Conference on Some Mathematical Approximation Approaches in Data Science,
	Hangzhou, Zhejiang University, China
2016.09	Mecklenburg Workshop on Approximation Methods and Data Analysis, University of Luebeck,
	Germany
2016.06	International Conference: East Asia Section of SIAM (EASIAM 2016), University of Macau, Macau
2016.05	15 th International Conference on Approximation Theory, San Antonio, USA
2016.02	IM-Workshop on Applied Approximation, Signals and Images, Bernried, Germany
2015	
2015.12	Workshop on Image Processing and PDE, Sun Yat-sen University, Guangzhou, China

2015.12 First Workshop on Computaional Science, Jinan University, Guangzhou, China

Workshop on PDE and Harmonic Analysis, City University of Hong Kong, Hong Kong

CURRICULUM VITAE

 2015.08 SPIE on Wavelets and Sparsity XVI, San Diego, USA 2015.06 International Conference "Wavelets and Applications", Euler International Mathematical Institute Petersburg, Russia 2015.01 Joint Workshop of Tel-Avis University and City University of Hong Kong, City University of Kong, Hong Kong 2014 2014.12 The 5th International Conference on Scientific Computing and Partial Differential Equations, Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong 2014.11 Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University 	Zhuang
Petersburg, Russia 2015.01 Joint Workshop of Tel-Avis University and City University of Hong Kong, City University of Kong, Hong Kong 2014 2014.12 The 5 th International Conference on Scientific Computing and Partial Differential Equations, Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong 2014.11 Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University	_
 Joint Workshop of Tel-Avis University and City University of Hong Kong, City University of Kong, Hong Kong The 5th International Conference on Scientific Computing and Partial Differential Equations, Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University 	titute, St.
 2014.12 The 5th International Conference on Scientific Computing and Partial Differential Equations, Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong 2014.11 Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University 	of Hong
Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong 2014.11 Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University	
Minisyposium on Applied Harmonic Analysis and Sparse Approximation, Hong Kong Bapti University, Hong Kong 2014.11 Workshop on Applied Harmonic Analysis and Approximation Theory, Sun Yat-sen University	
	st
Guangzhou, China	ty,
2014.11 ICERM Research Cluster: Computational Challenges in Sparse and Redundant Representation Brown University, Providence, RI, USA	ons,
2014.06 International Conference on Harmonic Analysis and Applications, Nankai University, Tianji	n, China
2014.05 5 th International Conference on Computational Harmonic Analysis, Vanderbilt University, N USA	ashville,
2014.05 Minisymposium: Directional Multiscale Representation Systems and Mathematical Imaging,	SIAM
Conference on Imaging Sciences, Hong Kong Baptist University, Hong Kong	
2014.04 Workshop on Applied Mathematics, City University of Hong Kong, Hong Kong	
2014.03 Workshop on Structured Preconditioning and Iterative Methods with Applications at TSIMF China	, Sanya,
2013	
2013.12 The 2^{nd} Guangzhou International Workshop on Mathematical Imaging, Sun Yat-sen Univers Guangzhou, China	ity,
2013.08 Applied Harmonic Analysis Conference, University of Calgary, Calgary, Canada	
2013.07 CMIV Workshop on Matrix Analysis and Applications, Hong Kong Baptist University, Hon	g Kong
2013.06 Seminar, School of Mathematical and Computational Sciences, Sun Yat-sen University, Guar China	ngzhou,
2013.06 The Hong Kong Mathematical Society, Annual General Meeting, City University of Hong Kong Hong Kong	ong,
2013.05 International Conference on Approximation Theory and Applications, City University of Ho Hong Kong	ng Kong,
2013.04 14th International Conference in Approximation Theory, San Antonio, TX, USA	
2013.04 Centre for Mathematical Imaging and Vision, Seminar, Hong Kong Baptist University, Hong	Kong
2013.03 Mathematical Analysis and its Applications Colloquium, Liu Bie Ju Centre, City University Kong, Hong Kong	of Hong
2012	
2012.11 PIMS/AMI Seminar, University of Alberta, Canada	
2012.10 Imaging Seminar, University of Houston, USA	

2012.08 Joint AB/BC Seminar, UBC, Canada

CURRICULUM VITAE

Xiaosheng Zhuang

	Alaosheng Zhuang
2012.06	Learning Theory and Approximation, Oberwolfach, Germany
2012.04	Campus Visit, City University of Hong Kong, Hong Kong
2011	
2011.07	International Conference on Applied Harmonic Analysis and Multiscale Computing
	University of Alberta, Edmonton, Canada
2011.06	Poster session in From Abstract to Computational Harmonic Analysis, Strobl, Austria
2011.05	Oberseminar, Jacobs University, Breman, Germany
2011.05	International Symposium in Approximation Theory, Vanderbilt University, USA
2011.05	The 9th International Conference on Sampling Theory and Applications, Nanyang Technological
	University, Singapore
2011.03	Operator Algebras and Representation Theory: Frames, Wavelets and Fractals, Oberwolfach,
	Germany
2011.01	Sparse Representations and Efficient Sensing of Data, Dagstuhl, Germany
2010	
2010.10	Mini-workshop: Shearlets, Oberwolfach, Germany
2010.03	13th International Conference on Approximation Theory, San Antonio, USA
2010.01	Workshop on Optimal Frames and Operator Algebras, 2010 AMS National Meeting, San Francisco,
	USA
2009	
2009.01	Applied Mathematics Graduate Student Conference (AMGSC 2009), Simon Fraser University,
	Vancouver, Canada
2008.06	Summer School and Workshops on Mathematical Imaging and Digital Media
	National University of Singapore, Singapore
2008.04	Graduate Colloquium, University of Alberta, Edmonton, Canada

Other Activities

2017.08	Visiting Prof. Bin Han, University of Alberta, Edmonton, Canada
2017.08	Visiting Dr. Chun-Kit Lai, San Francisco State University, San Francisco, USA
2017.08	Visiting Prof. Hrushikesh N. Mhaskar, Claremont Graduate University, USA
2017.05	Invited talk at Sun Yat-sen University, (by Prof. Yao LU), Guangzhou, China
2017.02	Visiting Dr. Yuguang Wang, La Trobe University, Melbourne, Australia
2016.08	Visiting Professor Gitta Kutyniok, Technical University of Berlin, Germany
2016.07	Visiting Professor Bin Han, University of Alberta, Canada
2015.07	Visiting Professor Bin Han, University of Alberta, Canada
2015.05	Visiting Professor Nira Dyn, Tel-Aviv University, Israel
2014.08	Visiting Professor Bin Han, University of Alberta, Canada
2013.06	Visiting Professor H.Z. Zhang, Sun Yat-sen University, China
2013.04	Visiting Professor C.K. Chui, University of Missouri, St. Louis, USA
2012.10	Visiting Professor B.G.Bodmann, University of Houston, TX, USA
2011.08	Visiting SLIM (Seismic Laboratory for Imaging and Modeling) of University of British
	Columbia, Vancouver, Canada
2011.08	Participate in Summer school on Applied Harmonic Analysis and Multiscale Computing,
	University of Alberta, Edmonton, Canada
2011.05	Participate in the 32nd Norddeutsches Kolloquium über Angewandte Analysis und Numerische
	Mathematik, Osnabrueck, Germany
2010.01	Participate in 2010 Joint Mathematics Meeting, San Francisco, USA
2009.05	Participate in Summer School/ Workshop on Multivariate Splines and Their Applications,
	University of Georgia, Athens, USA
2007.09	Participate in BIRS Workshop: Trends in Applied Harmonic Analysis
	Banff, Canada
2007.08	Participate in ISFMA Symposium on Wavelet Methods in Mathematical Analysis and Engineering
	Zhuhai, China
2007.05	Participate in Western Canadian Conference for Young Researchers in Mathematics 2007, Calgary
	Canada
2006.05	Western Canadian Conference for Young Researchers in Mathematics 2006, Edmonton, Canada
2008.11	Volunteer in SNAP Math Fair, University of Alberta, Edmonton
2008.03	Volunteer in SNAP Math Fair, University of Alberta, Edmonton
2002.05	Participated in the ACM College Programming Contest (ACM-CPC) of Sun Yat-Sen University,
	China. Got 3rd prize
2001.10	Passed the National Computer Software Test and got a Rank Certificate

Research Students, Assistants, and Visitors

Draf Cananai AN Linan University Cyanarhay China

Visitors

2017.07	Prof. Congpet AN, Jinan University, Guangzhou, China
2017.05	Prof. Bin Han, University of Alberta, Canada

2017.05 Prof. H.N.Mhaskar, Claremont University, USA

2016.07 Prof. Nira Dyn, Tel-Aviv Univ., Israel

2016.07 Prof. Chaoqiang Tan, Shantou Univ., China
 2016.05 Prof. H.N.Mhaskar, Claremont University, USA
 2016.05 Prof. Bin Han, University of Alberta, Canada

2016.02-2016.04 Prof. Congpei AN, Jinan University, Guangzhou, China

2016.01 Prof. Chaoqiang Tan, Shantou Univ., China 2015.02 Prof. Chaoqiang Tan, Shantou Univ., China 2014.12 Prof. Philipp Grohs, ETH Zurich, Switzerland. 2014.12 Prof. Bin Han, University of Alberta, Canada 2014.07 Prof. Chaoqiang Tan, Shantou Univ., China Prof. Chaoqiang Tan, Shantou Univ., China 2014.01 2013.06 Prof. Chaoqiang Tan, Shantou Univ., China 2013.05 Prof. Bin Han, University of Alberta, Canada

Post-docs

2016.04-2016.10 Yun CHEN (PhD: Sun Yat-sen Unviersity)

2015.11-2016.08 Yuguang WANG (PhD: New South Wales University)

Ph.D. Students

2015.09-Present Zhihua CHE

Final Year Project Students

2016.09-2017.05 Xinrui TAN 2013.09-2014.05 Ka Wing HO

Research Students

2017.10-2017.12 Hao Zhang, Wenxuan DAN 2017.06-2017.08 Zhen ZHANG, Hao ZHANG