Man-Kwun Chiu

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National Institute of Informatics
JST, ERATO, Kawarabayashi Large Graph Project
⮐ *https://chiumk.github.io/*

Education

2008–2014 **Doctor of Philosophy in Computer Science and Engineering**, *The Hong Kong University of Science and Technology*, Hong Kong.
Thesis title: Manifold Reconstruction from Discrete Point Sets

Supervisor : Dr. Siu-Wing Cheng

2006–2008 **Master of Philosophy in Computer Science and Engineering**, *The Hong Kong University of Science and Technology*, Hong Kong.
Thesis title : Dimension Detection via Slivers

Supervisor : Dr. Siu-Wing Cheng

2002–2006 **Bachelor of Engineering in Computer Science with minor in Mathematics**, *The Hong Kong University of Science and Technology*, Grade : 11.39 out of 12.
First Class Honors

Work Experience

2015–Present **Project Researcher**, *JST ERATO Kawarabayashi Large Graph Project*, National Institute of Informatics, Japan.

2014–2015 **Post-doctoral Fellow**, *HKUST*, Hong Kong.

2006–2014 **Teaching/Research Assistant**, *HKUST*, Hong Kong.

2004–2005 **Undergraduate Internship**, *HSBC IT department*, Hong Kong.

Scholarships and awards

2006 HKUST Academic Achievement Medal

Awarded annually to the top 1% HKUST graduates

2002–2006 Dean's List: six semesters

Obtained a term grade average of at least 10pt(A-) (12 pt scale)

2006 Hong Kong Telecom Institute of Information Technology Scholarship ($\approx$ US$4000)

2006 Wu Ti Hsien Science & Education Foundation Fund Scholarship ($\approx$ US$1200)

2004 Wu Ti Hsien Science & Education Foundation Fund Scholarship ($\approx$ US$1200)

2004 The Chinese General Chamber of Commerce Scholarship ($\approx$ US$4000)

Publications

Publications in international journals

[1] Jean-François Baffier, Man-Kwun Chiu, Yago Diez, Matias Korman, Valia Mitsou, André van Renssen, Marcel Roeloffzen, and Yushi Uno. "Hanabi is NP-hard, Even for Cheaters who Look at Their Cards". In: *Theoretical Computer Science* 675 (2017), pp. 43–55.

[2] Siu-Wing Cheng and Man-Kwun Chiu. "Tangent Estimation from Point Samples". In: *Discrete & Computational Geometry* 56.3 (2016), pp. 505–557.

[3] Siu-Wing Cheng, Man-Kwun Chiu, Jiongxin Jin, and Antoine Vigneron. "Navigating Weighted Regions with Scattered Skinny Tetrahedra". In: *International Journal of Computational Geometry and Applications* ().

Publications in refereed conferences

[1] Paz Carmi, Man-Kwun Chiu, Matthew J. Katz, Matias Korman, Yoshio Okamoto, André van Renssen, Marcel Roeloffzen, Taichi Shiitada, and Shakhar Smorodinsky. "Balanced Line Separators of Unit Disk Graphs". In: *Proceedings of the 15th Algorithms and Data Structures Symposium (WADS 2017)*. Vol. 10389. Lecture Notes in Computer Science. 2017, pp. 241–252.

[2] Man-Kwun Chiu and Matias Korman. "High Dimensional Consistent Digital Segments". In: *33rd International Symposium on Computational Geometry (SoCG 2017)*. 2017, 31:1–31:15.

[3] Jean-François Baffier, Man-Kwun Chiu, Yago Diez, Matias Korman, Valia Mitsou, André van Renssen, Marcel Roeloffzen, and Yushi Uno. "Hanabi is NP-complete, Even for Cheaters who Look at Their Cards". In: *Proceedings of the 8th International Conference on Fun with Algorithms (FUN 2016)*. 2016, 4:1–4:17.

[4] Siu-Wing Cheng, Man-Kwun Chiu, Jiongxin Jin, and Antoine Vigneron. "Navigating Weighted Regions with Scattered Skinny Tetrahedra". In: *Proceedings of the 26th International Symposium on Algorithms and Computation (ISAAC 2015)*. 2015, pp. 35–45.

[5] Siu-Wing Cheng and Man-Kwun Chiu. "Implicit Manifold Reconstruction". In: *Proceedings of the 25th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2014)*. 2014, pp. 161–173.

[6] Siu-Wing Cheng and Man-Kwun Chiu. "Dimension detection via slivers". In: *Proceedings of the 20th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2009)*. 2009, pp. 1001–1010.

Conference presentations

July 2017 **High Dimensional Consistent Digital Segments**, *the 33rd International Symposium on Computational Geometry (SoCG 2017)*, Brisbane, Australia.

May 2017 **High Dimensional Consistent Digital Segments**, *the 10th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2017)*, HKUST, Hong Kong.

Dec. 2015 **Navigating Weighted Regions with Scattered Skinny Tetrahedra**, *the 26th International Symposium on Algorithms and Computation (ISAAC 2015)*, Nagoya, Japan.

May 2014 **Implicit Manifold Reconstruction**, *the 7th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2014)*, Hangzhou, China.

Jan. 2014	**Implicit Manifold Reconstruction**, *the 25th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2014)*, Portland, USA.
Nov. 2013	**Tangent Estimation from Point Samples**, *the ACM-HK Student Research and Career Day 2013*, HKUST, Hong Kong.
Apr. 2012	**Tangent Estimation from Point Samples**, *the 5th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2012)*, Shanghai, China.
Apr. 2009	**Dimension detection via slivers**, *the 2nd Annual Meeting of the Asian Association for Algorithms and Computation (AAAC 2009)*, Hangzhou, China.
Mar. 2009	**Dimension detection via slivers**, *the ACM-HK Student Research and Career Day 2009*, Hong Kong Baptist University, Hong Kong.
Jan. 2009	**Dimension detection via slivers**, *the 20th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2009)*, New York, USA.

Reviews

I have reviewed papers for the following journals and conferences.

Journals

Algorithmica

Journal of Computational Geometry (JoCG)

Journal of Information Processing (JIP)

Journal of Information Science and Engineering (JISE)

Conferences

Algorithms and Data Structures Symposium (WADS)

International Computing and Combinatorics Conference (COCOON)

International Conference and Workshops on Algorithms and Computation (WAL-COM)

International Symposium on Algorithms and Computation (ISAAC)

International Symposium on Computational Geometry (SoCG)

Japan Conference on Discrete and Computational Geometry and Graphs (JCDCG^2)

Scandinavian Symposium and Workshops on Algorithm Theory (SWAT)

Programming Languages

MATLAB, LaTeX, C++, Java, COBOL, ASP.NET

Languages

Chinese (Cantonese)	**Mothertongue**
English, Chinese (Putonghua)	**Fluent**
Japanese	**Basic**