CCCG 2014 Program

Note: All the presentations take place in the Kenneth C. Rowe Management Building, Dalhousie University, 6100 University Avenue. Session A, invited talks, open problem session and business meeting are in Room 1020, and Session B is in room 1016.

August 10 (Sunday)		
18:00	21:30	Welcome Reception at Rockbottom Brewpub, 5686 Spring Garden Road. Appetizers and drink tickets will be provided. Cash bar and kitchen open for people wishing to eat/drink more.

August 11 (Monday)			
8:30	9:00	Registration and Coffee	
9:00	10:00	Plenary talk: Computational Topology in Reconstruction, Mesh Generation, and Data Analysis Tamal K. Dey	
		Session 1A	Session 1B
10:00	10:25	Kinetic Data Structures for the Semi-Yao Graph and All Nearest Neighbors in R^d Zahed Rahmati, Mohammad Ali Abam, Valerie King and Sue Whitesides	Computing the Geodesic Centers of a Polygonal Domain Sang Won Bae, Matias Korman and Yoshio Okamoto
10:25	10:50	Windows into Geometric Events: Data Structures for Time-Windowed Querying of Temporal Point Sets Michael J. Bannister, William E. Devanny, Michael T. Goodrich, Joseph A. Simons and Lowell Trott	Space-Efficient Algorithm for Computing a Centerpoint of a Point Set in R^2 Binay K. Bhattacharya, Subhas C. Nandy and Sasanka Roy
10:50	11:15	Coffee Break	
		Session 2A	Session 2B
11:15	11:40	Quality Ratios of Measures for Graph Drawing Styles Michael Hoffmann, Marc van Kreveld, Vincent Kusters and Günter Rote	On the Computational Complexity of Partitioning Weighted Points into a Grid of Quadrilaterals Alexander Idelberger and Maciej Liśkiewicz
11:40	12:05	Drawing Plane Triangulations with Few Segments Stephane Durocher and Debajyoti Mondal	Minimum Dilation Triangulation: Reaching Optimality Efficiently Aléx F. Brandt, Miguel M. Gaiowski, Cid C. de Souza and Pedro J. de Rezende
12:05	12:30	Non-Shellable Drawings of K_n with Few Crossings Bernardo M. Ábrego, Oswin Aichholzer, Silvia Fernández-Merchant, Pedro Ramos and Birgit Vogtenhuber	An Improved Method for Generating Triangle-Mesh Models of Images Xiao (Brian) Ma and Michael D. Adams
12:30	14:00	Lunch	

		Session 3A	Session 3B
14:00	14:25	On the Chromatic Art Gallery Problem Sándor P. Fekete, Stephan Friedrichs, Michael Hemmer, Joseph B. M. Mitchell and Christiane Schmidt	Continuous Yao Graphs Luis Barba, Prosenjit Bose, Jean-Lou De Carufel, Mirela Damian, Rolf Fagerberg, André van Renssen, Perouz Taslakian and Sander Verdonschot
14:25	14:50	Covering Orthogonal Polygons with Sliding k-Transmitters Salma Sadat Mahdavi, Saeed Seddighin and Mohammad Ghodsi	A Note on Online Steiner Tree Problems Gokarna Sharma and Costas Busch
14:50	15:15	On the VC-Dimension of Visibility in Monotone Polygons Matt Gibson, Erik Krohn and Qing Wang	Approximating Full Steiner Tree in a Unit Disk Graph Ahmad Biniaz, Anil Maheshwari and Michiel Smid
15:15	15:40	Representing a Planar Straight-Line Graph Using Few Obstacles Matthew P. Johnson and Deniz Sariöz	A Linear Time Euclidean Spanner on Imprecise Points Jiemin Zeng and Jie Gao
15:40	16:05	Coffee Break	
		Session 4A	Session 4B
16:05	16:30	The Duality of Geodesic Voronoi/Delaunay Diagrams For An Intrinsic Discrete Laplace-Beltrami Operator on Simplicial Surfaces Yong-Jin Liu, Chunxu Xu, Ying He and Deok-Soo Kim	Sphere Packing with Limited Overlap Mabel Iglesias-Ham, Michael Kerber and Caroline Uhler
16:30	16:55	Forest-Like Abstract Voronoi Diagrams in Linear Time Cecilia Bohler, Rolf Klein and Chih-Hung Liu	Almost Online Square Packing Shahin Kamali and Alejandro López-Ortiz
16:55	17:20	Voronoi Games and Epsilon Nets Aritra Banik, Jean-Lou De Carufel, Anil Maheshwari and Michiel Smid	Minimum Convex Container of Two Convex Polytopes under Translations Hee-Kap Ahn, Sang Won Bae, Otfried Cheong, Dongwoo Park and Chan-Su Shin
17:20	17:45	Straight Skeletons by Means of Voronoi Diagrams Under Polyhedral Distance Functions Stefan Huber, Oswin Aichholzer, Thomas Hackl and Birgit Vogtenhuber	Uniqueness of Optimal Cube Wrapping Qinxuan Pan

August 12 (Tuesday)			
8:30	9:00	Registration and Coffee	
9:00	10:00	Plenary talk: Cuttings in 2D Revisited Timothy M. Chan	
		Session 5A	Session 5B
10:00	10:25	Graph Drawings with Relative Edge Length Specifications Oswin Aichholzer, Michael Hoffmann, Marc Van Kreveld and Günter Rote	On Combinatorial Depth Measures Stephane Durocher, Robert Fraser, Alexandre Leblanc, Jason Morrison and Matthew Skala
10:25	10:50	Drawing the Horton Set in an Integer Grid of Minimun Size Luis Barba, Frank Duque, Ruy Fabila-Monroy and Carlos Hidalgo-Toscano	Decontaminating Planar Regions by Sweeping with Barrier Curves Borislav Karaivanov, Minko Markov, Jack Snoeyink and Tzvetalin S. Vassilev
10:50	11:15	Coffee Break	

		Session 6A	Session 6B
11:15	11:40	Low Space Data Structures for Geometric Range Mode Query Stephane Durocher, Hicham El-Zein, J. Ian Munro and Sharma V. Thankachan	Packing Plane Spanning Trees and Paths in Complete Geometric Graphs Oswin Aichholzer, Thomas Hackl, Matias Korman, Marc Van Kreveld, Maarten Löffler, Alexander Pilz, Bettina Speckmann and Emo Welzl
11:40	12:05	A Succinct, Dynamic Data Structure for Proximity Queries on Point Sets Prayaag Venkat and David M. Mount	On the Spanning Ratio of Constrained Yao-Graphs André van Renssen
12:05	12:30	Maximum Independent Set for Interval Graphs and Trees in Space Efficient Models Binay K. Bhattacharya, Minati De, Subhas C. Nandy and Sasanka Roy	The Convex Hull of Points on a Sphere is a Spanner Prosenjit Bose, Simon Pratt and Michiel Smid
12:30	14:00	Lunch	
		Session 7A	Session 7B
14:00	14:25	Turning Orthogonally Convex Polyhedra into Orthoballs Fidel Barrera-Cruz, Therese Biedl, Martin Derka, Stephen Kiazyk, Anna Lubiw and Hamideh Vosoughpour	Order types and cross-sections of line arrangements in R^3 Oswin Aichholzer, Ruy Fabila-Monroy, Ferran Hurtado, Pablo Pérez-Lantero, Andres J. Ruiz-Vargas, Jorge Urrutia and Birgit Vogtenhuber
14:25	14:50	Bumpy Pyramid Folding Zachary R. Abel, Erik D. Demaine, Martin L. Demaine, Hiro Ito, Jack Snoeyink and Ryuhei Uehara	Dimension Detection with Local Homology Tamal K. Dey, Fengtao Fan and Yusu Wang
14:50	15:15	Coffee Break	
15:15	16:00	Open Problem Session	
16:00	16:25	Business Meeting	
17:30		Conference Banquet at the Canadian Museum of Immigration (Pier 21) 1055 Marginal Road (about 30 minutes' walk from conference rooms) A reception will be held in Rudolph P. Bratty Exhibition Hall of the museum, where museum interpretative staffs are scheduled on-site. A dinner will follow in Kenneth C. Rowe Heritage Hall of the museum.	

August 13 (Wednesday)			
8:30	9:00	Registration and Coffee	
9:00	10:00	Plenary talk: Time, Space, and Precision: Revisiting Classic Problems in Computational Geometry with Degree-Driven Analysis Jack Snoeyink	
		Session 8A	Session 8B
10:00	10:25	Window Queries On Planar Subdivisions Arising From Overlapping Polygons Stuart A. Macgillivray and Bradford C. Nickerson	On the d-Runaway Rectangle Escape Problem Aniket Basu Roy, Sathish Govindarajan, Neeldhara Misra and Shreyas Shetty
10:25	10:50	Improved Bounds for Smallest Enclosing Disk Range Queries Sankalp Khare, Jatin Agarwal, Nadeem Moidu and Kannan Srinathan	The Maximum Disjoint Set of Boundary Rectangles Amirmahdi Ahmadinejad and Hamid Zarrabi-Zadeh

10:50	11:15	Coffee Break	
		Session 9A	Session 9B
11:15	11:40	Covering Grids by Trees Adrian Dumitrescu and Csaba Tóth	The τ-Skyline for Uncertain Data Haitao Wang and Wuzhou Zhang
11:40	12:05	Geometric Hitting Set and Set Cover Problem with Half-Strips Apurva Mudgal and Supantha Pandit	Pursuit and Evasion with Uncertain Bearing Measurements Josh Vander Hook and Volkan Isler
12:05	12:30	A Distributed Algorithm for Approximate Mobile Sensor Coverage Esther Ezra, Jiemin Zeng and Jie Gao	The Generalized Minimum Manhattan Network Problem (GMMN) - Scale Diversity Aware Approximation and a Primal-Dual Algorithm Stefan Funke and Martin P. Seybold
12:30	14:00	Lunch	
		Session 10A	Session 10B
14:00	14:25	The Mutual Visibility Problem for Oblivious Robots Giuseppe Antonio Di Luna, Paola Flocchini, Federico Poloni, Nicola Santoro and Giovanni Viglietta	A Separator Theorem for Intersecting Objects in the Plane Nabil Mustafa, Rajiv Raman and Saurabh Ray
14:25	14:50	Visibility Graphs, Dismantlability, and the Cops and Robbers Game Anna Lubiw and Hamideh Vosoughpour	The Convex Configurations of "Sei Shonagon Chie no Ita" and Other Dissection Puzzles Eli Fox-Epstein and Ryuhei Uehara
14:50	15:15	A PTAS for the Continuous 1.5D Terrain Guarding Problem Stephan Friedrichs, Michael Hemmer and Christiane Schmidt	Searching by Panning and Zooming Prosenjit Bose, John Howat and Pat Morin
15:15	15:40	Routing in a Polygonal Terrain with the Shortest Beacon Watchtower Bahram Kouhestani, David Rappaport and Kai Salomma	Quickly Placing a Point to Maximize Angles Boris Aronov and Mark Yagnatinsky
15:40	16:05	Coffee Break	
		Session 11A	Session 11B
16:05	16:30	Colored Ray Configurations Ruy Fabila-Monroy, Alfredo García, Ferran Hurtado, Rafel Jaume, Pablo Pérez-Lantero, Maria Saumell, Rodrigo I. Silveira, Javier Tejel and Jorge Urrutia	Bottleneck Bichromatic Plane Matching of Points Ahmad Biniaz, Anil Maheshwari and Michiel Smid
16:30	16:55	Planar Graphs with Many Perfect Matchings and Forests Michael Biro	All Approximating Segments for a Sequence of Points Ghobad Emadi and Alireza Zarei
16:55	17:20	On the Use of Adaptive, Exact Decisions Number Types Based on Expression-Dags in Geometric Computing Stefan Schirra	Approximate Matching of Curves to Point Sets Paul Accisano and Alper Üngör
17:20	17:45	An Incidence Geometry Approach to Dictionary Learning Meera Sitharam, Mohamad Tarifi and Menghan Wang	