

Dec 7: Workshop on Frontiers of Algorithms and Computation @Academia Sinica, Taipei	
09:00-09:30	Registration
09:30-10:30	Shanghua Teng (University of Southern California) <i>Proper Learnability and the Role of Unlabeled Data and Regularization</i>
10:30-11:00	Coffee/Tea Break
11:00-12:00	Yossi Azar (Tel-Aviv University) <i>Competitive Bundle Trading</i>
12:00-13:00	Lunch
13:00-14:00	Special Event Chair: Danny Chen (University of Notre Dame)

Dec 8: The 36th International Symposium on Algorithms and Computation (ISAAC 2025) @Silks Place, Tainan	
08:30-09:00	Registration
09:00-10:00	Keynote Speech: Piotr Indyk (Massachusetts Institute of Technology) <i>Challenges and Opportunities of Graph-Based Algorithms for Similarity Search</i>
10:00-10:35	Coffee/Tea Break
<div> <div>Session 1-1A: TSP &amp; Approximation</div> <div> <div>10:35-11:00</div> <div>Parameterized Complexity of Directed Traveling Salesman Problem</div> <div>11:00-11:25</div> <div>An Optimal Algorithm for the Stackcrane Problem on Fixed Topologies</div> <div>11:25-11:50</div> <div>Approximation Schemes for k-Subset Sum Ratio and k-Way Number Partitioning Ratio</div> </div> </div> <div> <div>Session 1-1B: Solution Spaces</div> <div> <div>10:35-11:00</div> <div>A General Framework for Finding Diverse Solutions via Network Flow and Its Applications</div> <div>11:00-11:25</div> <div>Finding Diverse Solutions in Combinatorial Problems with a Distributive Lattice Structure</div> <div>11:25-11:50</div> <div>Reachability of Independent Sets and Vertex Covers under Extended Reconfiguration Rules</div> </div> </div>	
12:00-13:30	Lunch
<div> <div>Session 1-2A: Geometry (I)</div> <div> <div>13:30-13:55</div> <div>Covering Weighted Points Using Unit Squares</div> <div>13:55-14:20</div> <div>A Dimension-Reducing Fréchet Simplification Oracle</div> <div>14:20-14:45</div> <div>Incidences between Curves and Points on the Grid</div> <div>14:45-15:10</div> <div>Matchgate Signatures under Variable Permutations</div> </div> </div> <div> <div>Session 1-2B: Distributed Computation</div> <div> <div>13:30-13:55</div> <div>Anonymous Self-Stabilising Localisation via Spatial Population Protocols</div> <div>13:55-14:20</div> <div>Distributed Complexity of P<sub>k</sub>-Freeness: Decision and Certification</div> <div>14:20-14:45</div> <div>Polynomial Equivalence of Extended Chemical Reaction Models</div> <div>14:45-15:10</div> <div>Deterministic Local Problems in Radio Networks: On the Impact of Local Domination and a Bit of Advice</div> </div> </div>	
15:10-15:45	Coffee/Tea Break
<div> <div>Session 1-3A: Coloring</div> <div> <div>15:45-16:10</div> <div>Graph Coloring below Guarantees via Co-Triangle Packing</div> <div>16:10-16:35</div> <div>Precoloring Extension with Demands on Paths</div> <div>16:35-17:00</div> <div>Minimum Sum Coloring with Bundles in Trees and Bipartite Graphs</div> </div> </div> <div> <div>Session 1-3B: Fair Division &amp; Probability Distribution</div> <div> <div>15:45-16:10</div> <div>Maximizing Social Welfare among EF1 Allocations at the Presence of Two Types of Agents</div> <div>16:10-16:35</div> <div>Reforming an Unfair Allocation by Exchanging Goods</div> <div>16:35-17:00</div> <div>New Algorithmic Directions in Optimal Transport and Applications for Product Spaces</div> </div> </div>	

Dec 9: The 36th International Symposium on Algorithms and Computation (ISAAC 2025) @Silks Place, Tainan	
08:30-09:00	Registration
09:00-10:00	Keynote Speech: Mikkel Thorup (University of Copenhagen) <i>Hash Functions Bridging the Gap From Theory to Practice</i>
10:00-10:35	Coffee/Tea Break
<div> <div>Session 2-1A: Data Structures</div> <div> <div>10:35-11:00</div> <div>Space-Efficient Depth-First Search via Augmented Succinct Graph Encodings</div> <div>11:00-11:25</div> <div>Parallel Joinable B-Trees in the Fork-Join I/O Model</div> <div>11:25-11:50</div> <div>Compressibility Measures and Succinct Data Structures for Piecewise Linear Approximations</div> </div> </div> <div> <div>Session 2-1B: Planar</div> <div> <div>10:35-11:00</div> <div>Structural Parameterizations of Simultaneous Planarity</div> <div>11:00-11:25</div> <div>Star-Based Separators for Intersection Graphs of c-Colored Pseudo-Segments</div> <div>11:25-11:50</div> <div>On the Approximability of the Monitoring Edge Geodetic Set Problem</div> </div> </div>	
12:00-13:30	Lunch
<div> <div>Session 2-2A: Geometry (II)</div> <div> <div>13:30-13:55</div> <div>Realizing Metric Spaces with Convex Obstacles</div> <div>13:55-14:20</div> <div>BFS and Reverse Shortest Paths for Ball Intersection Graphs in Three and Higher Dimensions</div> <div>14:20-14:45</div> <div>Circle-Segment Intersection Queries in Connected Geometric Graphs</div> </div> </div> <div> <div>Session 2-2B: Graph</div> <div> <div>13:30-13:55</div> <div>Quadratic Kernel for Cliques or Trees Vertex Deletion</div> <div>13:55-14:20</div> <div>Finding d-Cuts in Claw-Free Graphs</div> <div>14:20-14:45</div> <div>Sparse Induced Subgraphs in P<sub>7</sub>-Free Graphs of Bounded Clique Number</div> </div> </div>	
15:00-17:30	City Tour
18:30-21:00	Banquet

Dec 10: The 36th International Symposium on Algorithms and Computation (ISAAC 2025) @Silks Place, Tainan	
08:30-09:00	Registration
09:00-09:30	Best Paper Award Presentation: New Approximate Distance Oracles and Their Applications
09:30-10:00	Best Student Paper Award Presentation: Simple, Strict, Proper, and Directed: Comparing Reachability in Directed and Undirected Temporal Graphs
10:00-10:35	Coffee/Tea Break
<div> <div>Session 3-1A: Dichotomy Results</div> <div> <div>10:35-11:00</div> <div>Minimum Partition of Polygons under Width and Cut Constraints</div> <div>11:00-11:25</div> <div>A Dichotomy for 1-Planarity with Restricted Crossing Types Parameterized by Treewidth</div> <div>11:25-11:50</div> <div>Coloring Reconfiguration under Color Swapping</div> </div> </div> <div> <div>Session 3-1B: Scheduling</div> <div> <div>10:35-11:00</div> <div>A Tight Lower Bound for Online Service with Deadlines and Lazy Server</div> <div>11:00-11:25</div> <div>Hardness and Fixed Parameter Tractability for Pinwheel Scheduling Problems</div> <div>11:25-11:50</div> <div>Time-Optimal k-Server</div> </div> </div>	
12:00-13:30	Lunch
<div> <div>Session 3-2A: Temporal Graphs</div> <div> <div>13:30-13:55</div> <div>Pathfinding in Self-Deleting Graphs</div> <div>13:55-14:20</div> <div>Realization of Temporally Connected Graphs Based on Degree Sequences</div> <div>14:20-14:45</div> <div>Optimal Bipartite Online Matching in Degree 2 Graphs</div> </div> </div> <div> <div>Session 3-2B: Parameterized Algorithms</div> <div> <div>13:30-13:55</div> <div>Structural Parameters for Steiner Orientation</div> <div>13:55-14:20</div> <div>Parameterized Reunion with Achromatic Number</div> <div>14:20-14:45</div> <div>A Parameterized Study of Secluded Structures in Directed Graphs</div> </div> </div>	
14:45-15:20	Coffee/Tea Break
<div> <div>Session 3-3A: String and Enumeration</div> <div> <div>15:20-15:45</div> <div>Streaming Periodicity with Mismatches, Wildcards, and Edits</div> <div>15:45-16:10</div> <div>Small Space Encoding and Recognition of k-Palindromic Prefixes</div> <div>16:10-16:35</div> <div>Enumerating the Irreducible Closed Sets of an Acyclic Implicational Base of Bounded Degree</div> </div> </div> <div> <div>Session 3-3B: Routing</div> <div> <div>15:20-15:45</div> <div>Traffic-Oblivious Multi-Commodity Flow Network Design</div> <div>15:45-16:10</div> <div>Parameterized Algorithms for the Drone Delivery Problem</div> <div>16:10-16:35</div> <div>Local Routing on Ordered Theta-Graphs</div> </div> </div>	