SPIRE 2004 Program

Tuesday, October 5
13:30 – 18:30 Excursion to Venice
19:00 Welcome Reception and Registration

Wednesday, October 6
08:00 Registration
08:45 Opening
09:00 – 10:00 Session 1
   Information Retrieval at the intersection of Logic, Probability, and Vector Spaces: Knowing and Guessing
   C.J. “Keith” van Rijsbergen (University of Glasgow, UK)
10:00 – 11:15 Session 2
10:00 Efficient One Dimensional Real Scaled Matching
   Amihood Amir, Ayelet Butman, Moshe Lewenstein, Ely Porat, Dekel Tsur (Israel)
10:25 Linear Time Algorithm for the Longest Common Repeat Problem
   Inbok Lee (Korea), Costas Iliopoulos (UK), Kunsoo Park (Korea)
10:50 Automaton-based Sublinear Keyword Pattern Matching
   Loek Cleophas, Bruce W. Watson, Gerard Zwaan (The Netherlands)
11:15 – 11:45 Coffe Break
11:45 – 13:00 Session 3
11:45 Techniques for Efficient Query Expansion
   Bodo Billerbeck, Justin Zobel (Australia)
12:10 Inferring Query Performance Using Pre-retrieval Predictors
   Ben He, Iadh Ounis (UK)
12:35 A Scalable System for Identifying Co-Derivative Documents
   Yaniv Bernstein, Justin Zobel (Australia)
13:00 – 14:10 Lunch
14:10 – 15:00 Session 4
14:10 Searching for a Set of Correlated Patterns
   Shmuel T. Klein, Riva Shalom (Israel)
14:20 Linear Nondeterministic Dawg String Matching Algorithm
   Longtao He, Binxing Fang (China)
14:30 Permutated and Scaled String Matching
   Ayelet Butman, Revital Eres, Gad Landau (Israel)
14:40  Bit-Parallel Branch&Bound Algorithm for Transposition Invariant LCS
Kjell Lemström (Finland), Gonzalo Navarro (Chile), Yoan Pinzon (Colombia, UK)

14:50  A New Feature Normalization Scheme Based on Eigenspace for Noisy Speech Recognition
Yoonjae Lee, Hanseok Ko (South Korea)

15:00 – 15:50 Session 5

15:00  Fast Detection of Common Sequence Structure Patterns in RNAs
Rolf Backofen, Sven Siebert (Germany)

15:25  An Efficient Algorithm for the Longest Tandem Scattered Subsequence Problem
Adrian Kosowski (Poland)

15:50 – 16:20 Coffee Break

16:20 – 17:10 Session 6

16:20  Automatic Document Categorization Based on k-NN and Object-Based Thesauri
Sun Lee Bang, Hyung Jeong Yang, Jae Dong Yang (South Korea)

16:45  Indexing Text Documents Based on Topic Identification
Manonton Butarbutar, Susan McRoy (USA)

17:10 – 18:00 Session 7

17:10  A Cross-comparison for Two-dimensional Text Categorization
Giorgio Maria Di Nuzzio (Italy)

17:20  Evaluation of Web Page Representations by Content through Clustering
Arantza Casillas, Victor Fresno, M. Teresa González de Lena, Raquel Martínez (Spain)

17:30  Evaluating Relevance Feedback and Display Strategies for Searching on Small Displays
Vishwa Vinay, Ingemar Cox, Natasa Milic-Frayling, Ken Wood (UK)

17:40  Information Extraction by Embedding HMM to the Set of Induced Linguistic Feature Space
Hyun Chul Lee (Canada), Jian Chang Mao (USA)

17:50  Finding Cross-lingual Spelling Variants
Krister Lindén (Finland)

Thursday, October 7

08:30 Registration

09:00 – 10:00 Session 8

Matching, Retrieval, Learning, and Discovery
Setsuo Arikawa (Kyushu University, Japan)

10:00 – 11:15 Session 9

10:00  An Efficient Index Data Structure with the Capabilities of Suffix Trees and Suffix Arrays for
Alphabets of Non-Negligible Size
Dong Kyue Kim, Jeong Eun Jeon, Heejin Park (South Korea)

10:25  An Alphabet-Friendly FM-index
Paolo Ferragina, Giovanni Manzini (Italy), Veli Mäkinen (Finland), Gonzalo Navarro (Chile)

10:50  Concurrency Control and I/O-Optimality in Bulk Insertion
Kerttu Pollari-Malmi, Eljas Soisalon-Soininen (Finland)
11:15 – 11:45 Coffee Break

11:45 – 13:00 Session 10

11:45  *Processing Conjunctive and Phrase Queries with the Set-Based Model*
Bruno Póssas, Nivio Ziviani, Berthier Ribeiro-Neto, Wagner Meira Jr. (Brazil)

12:10  *Metric Indexing for the Vector Model in Text Retrieval*
Tomás Skopal, Pavel Moravec, Jaroslav Pokorný, Václav Snášel (Czech Republic)

12:35  *Negations and Document Length in Logical Retrieval*
David E. Losada, Alvaro Barreiro (Spain)

13:00 – 14:10 Lunch

14:10 – 15:00 Session 11

14:10  *An Improvement and an Extension on the Hybrid Index for Approximate String Matching*
Heikki Hyyrö (Finland, Japan)

14:20  *First Huffman, then Burrows-Wheeler: A Simple Alphabet-Independent FM-Index*
Szymon Grabowski (Poland), Veli Mäkinen (Finland), Gonzalo Navarro (Chile)

14:30  *Metric Indexes for Approximate String Matching in a Dictionary*
Kimmo Fredriksson (Finland)

14:40  *Simple Implementation of String B-trees*
Joong Chae Na, Kunsoo Park (South Korea)

14:50  *Alphabet Permutation for Differentially Encoding Text*
Gad Landau, Ofer Levi (Israel), Steven Skiena (USA)

15:00 – 15:50 Session 12

15:00  *A Space-Saving Linear-Time Algorithm for Grammar-Based Compression*
Hiroshi Sakamoto, Takuya Kida, Shinichi Shimozono (Japan)

15:25  *Simple, Fast, and Efficient Natural Language Adaptive Compression*
Nieves R. Brisaboa, Antonio Fariña (Spain), Gonzalo Navarro (Chile), Jose R. Paramá (Spain)

15:50 – 16:20 Coffee Break

16:20 – 17:10 Session 13

16:20  *Searching XML Documents Using Relevance Propagation*
Karen Sauvagnat, Mohand Boughanem, Claude Chrisment (France)

16:45  *Dealing with Syntactic Variation through a Locality-Based Approach*
Jesús Vilares, Miguel A. Alonso (Spain)

20:00  Conference Dinner

*Friday, October 8*

09:00 Registration

09:30 – 10:00 Session 15

09:30  *Efficient Extraction of Structured Motifs Using Box-Links*
Alexandra M. Carvalho, Ana T. Freitas, Arlindo L. Oliveira (Portugal), Marie-France Sagot (France)
09:40  Efficient Computation of Balancedness in Binary Sequence Generators
Pedro García-Mochales, Amparo Fúster-Sabater (Spain)

09:50  On Asymptotic Finite-State Error Repair
Manuel Vilares, Juan Otero, Jorge Graña (Spain)

10:00 – 11:15 Session 16

10:00  New Algorithms for Finding Monad Patterns in DNA Sequences
Ravi Vijaya Satya, Amar Mukherjee (USA)

10:25  Motif Extraction from Weighted Sequences
Costas Iliopoulos (England), Katerina Perdikuri,
Evangelos Theodoridis (Greece), Kostas Tsichlas (England)

10:50  Longest Motifs with a Functionally Equivalent Central Block
Maxime Crochemore (France, UK), Raffaele Giancarlo (Italy),
Marie-France Sagot (France, UK)

11:15 – 11:45 Coffee Break

11:45 – 12:35 Session 17

11:45  On the Transformation Distance Problem
Behshad Behzadi, Jean-Marc Steyaert (France)

12:10  On Classification of Strings
Elias Soisalon-Soininen, Tatu Ylonen (Finland)

12:35 Closing