

# Tutorials

## **Supervised and Semi-Supervised Learning for IR**

Yi Zhang (*University of California Santa Cruz, USA*)  
Rong Jin (*Michigan State University, USA*)

## **The Probabilistic Relevance Model: BM25 and Beyond**

Hugo Zaragoza (*Yahoo! Research Barcelona, Spain*)  
Stephen Robertson (*Microsoft Research Cambridge, UK*)

## **From 'Ultra-Light' to Naturalistic IR Interaction: A Framework for Research on Interactive IR in Context**

Peter Ingwersen (*Royal School of Library and Information Science, Denmark*)

## **Web Mining for Search**

Ricardo Baeza-Yates (*Yahoo! Research*)  
Rosie Jones (*Yahoo! Research*)

## **Content-based and Semantic Image/Video Retrieval**

Winston Hsu (*National Taiwan University, Taiwan*)  
Rong Yan (*IBM T. J. Watson Research Center, USA*)

## **Indian Language Information Retrieval: Dealing with Indian Language Issues**

Mandar Mitra (*Indian Statistical Institute, India*)  
Prasenjit Majumder (*Indian Statistical Institute, India*)  
Sobha L (*Anna University, India*)

## **Learning to Rank for Information Retrieval**

Tie-Yan Liu (*Microsoft Research Asia, China*)

## **Real World Text Mining**

Ronen Feldman (*Hebrew University of Jerusalem, Israel*)

## **Online Advertising: Business Models, Technologies and Issues**

James Shanahan (*Independent Consultant, USA*)  
Ayman Farahat (*Admob, USA*)

# Workshops

## Focused Retrieval: Question Answering, Passage Retrieval, Element Retrieval

Andrew Trotman (*University of Otago, New Zealand*)  
Shlomo Geva (*Queensland University of Technology, Australia*)  
Jaap Kamps (*University of Amsterdam, The Netherlands*)

## Learning to Rank for Information Retrieval

Hang Li (*Microsoft Research Asia, China*)  
Tie-Yan Liu (*Microsoft Research Asia, China*)  
ChengXiang Zhai (*University of Illinois at Urbana-Champaign, USA*)

## Searching Spontaneous Conversational Speech

Joachim Kohler (*Fraunhofer IAIS, Germany*)  
Martha Larson (*University of Amsterdam, The Netherlands*)  
Franciska de Jong (*University of Twente, The Netherlands*)  
Roeland Ordelman (*University of Twente, The Netherlands*)  
Wessel Kraaij (*TNO ICT, The Netherlands*)

## Analytics for Noisy Unstructured Text Data

Daniel Lopresti (*Lehigh University, USA*)  
Shourya Roy (*IBM India Research Lab, India*)  
Klaus Schulz (*University of Munich, Germany*)  
L. Venkata Subramaniam (*IBM India Research Lab, India*)

## Future Challenges in Expertise Retrieval

Krisztian Balog (*University of Amsterdam, The Netherlands*)  
Yong Yu (*Apex Knowledge & Data Management Lab, China*)

## Aggregated Search

Mounia Lalmas (*Queen Mary, University of London, UK*)  
Vanessa Murdock (*Yahoo! Research Barcelona, Spain*)

## Beyond Binary Relevance: Preferences, Diversity, and Set-Level Judgments

Paul N. Bennett (*Microsoft Research, USA*)  
Ben Carterette (*University of Massachusetts Amherst, USA*)  
Olivier Chapelle (*Yahoo! Research, USA*)  
Thorsten Joachims (*Cornell University, USA*)

## Mobile Information Retrieval

Kap Luk Chan (*Nanyang Technological University, Singapore*)  
Xing Xie (*Microsoft Research Asia, China*)  
Wang-Chien Lee (*Pennsylvania State University, USA*)  
Minoru Etoh (*NTT DoCoMo, Japan*)  
Flora S. Tsai (*Nanyang Technological University, Singapore*)

## Information Retrieval in Advertising

Ewa Dominowska (*Microsoft, USA*)  
Eugene Agichtein (*Emory University, USA*)  
James Shanahan (*Independent Consultant, USA*)  
Evgeniy Gabrilovich (*Yahoo! Research, USA*)

# Author Index

- Aberer, Karl ..... 733  
Acero, Alex ..... 339  
Agichtein, Eugene ..... 483, 707, 735, 737  
Airio, Eija ..... 59  
Akella, Ram ..... 227, 427  
Allan, James ..... 11, 235, 651  
Al-Maskari, Azzah ..... 59, 683  
Almeida, Humberto M. .... 267  
Alonso, Omar ..... 697  
Altingovde, Ismail Sengor ..... 861  
Amini, Massih-Reza ..... 99  
Ananiadou, Sophia ..... 787  
Anick, Peter ..... 701  
Arampatzis, Avi ..... 811  
Arapakis, Ioannis ..... 395, 891  
Argamon, Shlomo ..... 725  
Arguello, Jaime ..... 347  
Arnold, Andrew ..... 115  
Ashkan, Azin ..... 659  
Aslam, Javed A. .... 587, 603, 651  
Avrachenkov, Konstantin ..... 873  
Back, Maribeth ..... 315  
Baeza-Yates, Ricardo ..... 131  
Baglioglu, Ozgur ..... 885  
Bai, Peng ..... 749  
Bailey, Peter ..... 667  
Balog, Krisztian ..... 371, 753, 817  
Banchs, Rafael E. .... 863  
Bandyopadhyay, Ayan ..... 699  
Banerjee, Somnath ..... 867  
Bao, Shenghua ..... 155  
Bar-Yossef, Ziv ..... 865  
Bendersky, Michael ..... 491, 853  
Bennett, Paul N. .... 685  
Berlocher, Ivan ..... 703  
Bian, Jiang ..... 483  
Bilenko, Mikhail ..... 43, 705  
Brisaboa, Nieves R. .... 139  
Broder, Andrei ..... 403  
Broschart, Andreas ..... 845  
Bu, Jiajun ..... 741, 757  
Budura, Adriana ..... 733  
Buntine, Wray ..... 781  
Buscher, Georg ..... 387  
Büttcher, Stefan ..... 659  
Cai, Rui ..... 459  
Callan, Jamie ..... 347, 715  
Can, Fazli ..... 861, 885  
Cao, Guihong ..... 243  
Cao, Yang ..... 179  
Carbonell, Jaime G. .... 347, 715  
Carman, Mark J. T. .... 719  
Carterette, Ben ..... 651, 685  
Charikar, Moses ..... 123  
Chen, Chien Chin. .... 579  
Chen, Chun ..... 741, 757  
Chen, Enhong ..... 827  
Chen, Hsin-Hsi ..... 195  
Chen, Ing-Xiang ..... 801  
Chen, Kuan-Ting ..... 767  
Chen, Meng Chang ..... 579  
Chen, Weizhu ..... 749  
Chen, Zheng ..... 179, 749  
Cheng, Xueqi ..... 379, 743  
Chernov, Sergey ..... 894  
Chia, Tee Kiah ..... 363  
Cho, Junghoo ..... 507  
Ciccolo, Peter ..... 403  
Clarke, Charles L. A. .... 659  
Clements, Maarten ..... 739  
Clough, Paul ..... 59, 683  
Cong, Gao ..... 467  
Cormack, Gordon V. .... 659, 745  
Cotter, Philip ..... 787  
Crain, Steven P. .... 799  
Craswell, Nick ..... 667, 755  
Crecelius, Tom ..... 523, 884  
Crestani, Fabio ..... 719  
Croft, W. Bruce ..... 235, 475, 491, 571  
Cucerzan, Silviu ..... 841  
Cudré-Mauroux, Philippe ..... 733  
Dai, Wenyan ..... 627  
Damiani, Ernesto ..... 849  
Davison, Brian D. .... 443, 643  
de Campos, Luis M. .... 711  
de Rijke, Maarten ..... 371, 723, 753,  
773, 815, 817, 823  
de Vries, Arjen P. .... 667, 739  
Demir, Engin ..... 861  
Dengel, Andreas ..... 387  
Diaz, Fernando D. .... 805, 807, 809  
Ding, Chris ..... 187, 307, 831  
Ding, Fan ..... 855  
Dobrynin, Vladimir ..... 873  
Domshlak, Carmel ..... 547  
Dong, Wei ..... 123  
Doucet, Antoine ..... 843  
Downie, J. Stephen ..... 888  
Druck, Gregory ..... 595  
Duh, Kevin ..... 251  
Dumais, Susan T. .... 163, 791  
Dumoulin, Benoit ..... 751  
Dupret, Georges E. .... 331  
Elbassuoni, Shady ..... 721  
Elgersma, Erik ..... 723  
Elsas, Jonathan L. .... 347  
Fang, Hui ..... 219  
Fang, Lujun ..... 179  
Fariña, Antonio ..... 139  
Fei, Ben ..... 155  
Fernández-Luna, J. M. .... 711  
Fetterly, Dennis ..... 755  
Floréen, Patrik ..... 781  
Fortuna, Blaž ..... 883  
Fox, Edward A. .... 889  
Frieder, Ophir ..... 859  
Gabrilovich, Evgeniy ..... 403  
Gao, Bin ..... 451  
Gao, Jianfeng ..... 243  
Garain, Utpal ..... 803  
Garcia, Ernest V. .... 735  
Garcia-Molina, Hector ..... 531  
Geng, Xiubo ..... 115  
Gildea, Nicholas ..... 775  
Giles, C. Lee ..... 515  
Gkanogiannis, Anestis ..... 869  
Goharian, Nazli ..... 833  
Golovchinsky, Gene ..... 315  
Gonçalves, Marcos A. .... 267, 889  
Gong, Yihong ..... 635  
Goutte, Cyril ..... 99  
Gray, Philip D. .... 395  
Grobelnik, Marko ..... 883  
Guan, Ziyu ..... 757  
Guiver, John ..... 259  
Guo, Jiafeng ..... 379  
Guo, Qi ..... 707  
Hannah, David ..... 709  
Harpale, Abhay S. .... 91  
Hattori, Hiroyuki ..... 793  
Hauskrecht, Milos ..... 785  
He, Ben ..... 67, 727, 747  
He, Daqing ..... 882  
He, Shuyuan ..... 451

He, Yanxiang	283	Kim, HyunKi	829	Lin, Lan	777
Heath, Allison P.	43	Kim, Jungi	821	Lin, Luxin	837
Heymann, Paul	531	Kim, Kono	703	Lin, Yongjing	539
Hiemstra, Djoerd	763, 795, 797, 851	Kim, Seokhwan	875	Liu, Chang	892
Hoon, Gan Keng	879, 895	Kirchhoff, Katrin	251	Liu, Kangmiao	741
Hsu, Winston H.	767	Kishino, Yasue	759	Liu, Nathan N.	83
Hu, Jian	179	Kocberber, Seyit	885	Liu, Tie-Yan	107, 115, 451
Hu, Meishan	291, 729	Kolla, Maheedhar	659	Liu, Yandong	483, 735, 737
Hu, Qinmin	783	Kong, Tang Enya	879	Liu, Ying	539
Hu, Rong	749	Koolen, Marijn	847	Liu, Yuting	451
Hu, Tianming	871	Kraaij, Wessel	815, 823	Lu, Min	107
Hu, Xiao	888	Kukkonen, Joonas	781	Lu, Qin	283
Hu, Xiaohua	555	Kumaran, A	211	Lu, Yansheng	749
Huang, Jian	799	Kumaran, Giridhar	11	Luo, Dijun	831
Huang, Xiangji	783	Kurland, Oren	171, 547, 825, 853	Luo, Gang	3
Huete, Juan F.	711	Ladra, Susana	139	Luo, Hangzai	871
Jang, Myung-Gil	829	Lagerspetz, Eemil	781	Luo, Qiming	827
Järvelin, Kalervo	675	Lai, Wei	459	Luo, Yemin	837
Jaygarl, Hojun	801	Lalmas, Mounia	847	Luxenburger, Julia	721
Jeon, Jiwoon	475	Lam, Wai	35	Ma, Wei-Ying	107
Jeong, Minwoo	875	Larson, Martha	773	Ma, Wei-Ying	459
Jiang, Maojin	725	Larson, Ray R.	886	Ma, Zhiming	451
Jiang, Yu-Gang	769	Lee, Changki	829	Macdonald, Craig	67, 727, 747, 761
Jing, Liping	539	Lee, Gary Geunbae	875	MacKinnon, Ian	659
Joho, Hideo	709	Lee, Jong-Hyeok	821	Maeckawa, Takuya	759
Jones, M. Cameron	888	Lee, Kai-Fu	1	Maiti, Samaresh	699
Jose, Joemon M.	395, 709, 775	Lee, Kyung Soon	235	Majumder, Prasenjit	699
Joshi, Tanuja	211	Lee, Kyung-il	703	Mann, Gideon	595
Josifovski, Vanja	403	Lee, Wang-Chien	515	Marrara, Stefania	849
Joy, Joseph	211	Lee, Wee Sun	835	Mashiach, Li-Tal	865
Junqueira, Flavio P.	131	Lehtonen, Miro	843	Mayfield, James	813
Kacimi, Mouna	523, 884	Li, Baoli	735	McCallum, Andrew	595
Kalamboukis, Theodore	869	Li, Chunping	713	McNamee, Paul	813
Kalashnikov, Dmitri V.	27	Li, Haizhou	363	Mehrotra, Sharad	27
Kaltenbrunner, Andreas	863	Li, Hang	107, 115, 379, 451	Mehta, Bhaskar	75
Kamei, Koji	759	Li, Hua	179	Mei, Qiaozhu	611
Kamps, Jaap	763, 811, 847	Li, Huajing	515	Meij, Edgar	815, 817, 823, 898
Kang, In-Su	821	Li, Jia	515	Meira Jr., Wagner	267
Kanoulas, Evangelos	603	Li, Kai	123	Mengle, Saket S. R.	833
Kanoulas, Evangelos	651	Li, Linlin	771	Merhav, Yuval	859
Kantamneni, Raj Gopal	701	Li, Rongmei	763	Michel, Sebastian	523, 733, 884
Kantor, Paul B.	147	Li, Tao	187, 307, 819, 831	Mitra, Mandar	699
Kaptein, Rianne	763	Li, Wenjie	283	Mitra, Sukanya	699
Kardas, Suleyman	885	Li, Wenyuan	539	Mladenović, Dunja	883
Kekäläinen, Jaana	675	Li, Xiao	339	Moffat, Alistair	51, 687, 695
Kellner, Tobias	211	Liao, Wei-Shing	767	Mojdeh, Mona	745
Kelly, Liadh	899	Liebling, Daniel J.	163	Murray, G. Craig	705, 900
Keong, Phang Keat	879	Lim, Ee-Peng	291, 729	Murthy, Uma	889
Keskustalo, Heikki	675	Lin, Chin-Yew	467	Na, Seung-Hoon	821
Khurana, Udayan	211	Lin, Jian	881	Navarro, Gonzalo	139
Kikuchi, Masaaki	779	Lin, Jimmy	19	Neidl, Wolfgang	75

Nemirovsky, Danil	873
Neumann, Thomas	523, 884
Ng, Hwee Tou	363
Ngo, Chong-Wah	769
Nguyen, Doan	765
Nicholas, Charles	813
Nie, Jian-Yun	243
Nie, Lan	443
Nobata, Chikashi	787
Nuray-Turan, Rabia	27
Nurmi, Petteri	781
Oard, Douglas W.	203
Ocalan, Huseyin Cagdas	885
Okadome, Takeshi	759
Okamoto, Masayuki	779
Okazaki, Naoaki	787
Ounis, Iadh	67, 727, 747, 761
Paepcke, Andreas	563
Pajntar, Boštjan	883
Pal, Dipasree	699
Pal, Sukomal	699
Pan, Hanglin	887
Pan, Yan	837
Parreira, Josiane X.	523, 884
Pasi, Gabriella	849
Pavlu, Virgil	651
Peng, Fuchun	751
Peng, Jie	761
Peng, Wei	819, 831
Pham, Son Kim	873
Pickens, Jeremy	315
Pirkola, Ari	675
Piwowarski, Benjamin	331
Plachouras, Vassilis	131
Qi, Xiaoguang	643
Qin, Tao	115
Qiu, Guang	741
Qu, Mingcheng	741
Quan, Xiaojun	827
Qvarfordt, Pernilla	315
Radlinski, Filip	403
Rahurkar, Mandar	841
Ram, Ashwin	735
Ramage, Daniel	531
Ravana, Sri Devi	687
Rea, Brian	787
Reinders, Marcel J. T.	739
Richardson, Matthew	43, 705
Riedel, Lance	403
Robertson, Stephen	243, 587, 689
Rode, Henning	795, 797, 851
Roelleke, Thomas	435
Rueda-Morales, M. A.	711
Rupnik, Jan	883
Sakai, Tetsuya	691, 695
Sakurai, Yasushi	759
Sanderson, Mark	59, 499, 683
Sasaki, Yutaka	787
Schenkel, Ralf	523, 845, 884, 887
Scholer, Falk	693, 717
Seki, Kazuhiro	793
Sen, Aparajita	699
Sengar, Vibhuti	211
Seo, Jangwon	571
Serdyukov, Pavel	795, 797, 851, 893
Shah, Chirag	315, 896
Shao, Bo	187
Shum, Heung-Yeung	115
Si, Luo	419
Siddharth, Jonathan	563
Sifer, Mark	881
Sim, Khe Chai	363
Skobeltsyn, Gleb	131
Smirnova, Elena	873
Smith, Catherine L.	147
Smucker, Mark D.	19
Snelson, Edward	259
Soboroff, Ian	667, 747
Song, Yang	515
Song, Young-In	467
Su, Zhong	155
Sun, Aixin	291, 729
Sun, Yueheng	467
Sung, Sam Yuan	871
Talbot, Justin	697
Tan, Chew Lim	771
Tan, Saravadee Sae	879
Tan, Songbo	743
Tang, Chunqiang	3
Tang, Xiaoya	789
Tang, Yong	837
Teevan, Jaime	163, 791
Theobald, Martin	563
Thomas, Paul	667, 839
Torres, Ricardo da Silva	889
Trieschnigg, Dolf	815, 823, 897
Truong, Tuong-Vinh	99
Tryfonopoulos, Christos	323
Tsagias, Manos	773
Tsai, Ming-Feng	195
Tsujii, Jun'ichi	787
Tsuruoka, Yoshimasa	787
Turpin, Andrew	693, 717, 731
Uehara, Kuniaki	793
Ulusoy, Özgür	861
Uyar, Erkan	885
Vallet, David	857
van Elst, Ludger	387
Vechtomova, Olga	659
Veloso, Adriano A.	267
Venkatachalam, Logambigai	889
Villa, Robert	775
Vinay, Vishwa	755
Wan, Xiaojun	299
Wang, Bin	855
Wang, Can	757
Wang, Changhu	355
Wang, Dingding	307
Wang, Jun	435
Wang, Junfeng	757
Wang, Long	467
Wang, Mengqiu	419
Wang, Shuguang	785
Wang, Xuanhui	219
Wang, Ye-Yi	339
Wang, Yida	459
Wang, Yuefen	743
Wang, Yu-Ting	195
Webber, William	51, 695
Weerkamp, Wouter	371, 753, 817
Wei, Furu	283
Wei, Xing	751
Weikum, Gerhard	323, 523, 721, 884, 887
Welch, Michael J.	507
West, Kris	888
White, Ryen W.	43, 705, 791
Winter, Judith	890
Wong, Limsoon	2
Wong, Tak-Lam	35
Wong, Tik-Shun	35
Wu, Dan	882
Wu, Mingfang	717, 731
Wu, Ping-Jung	801
Wu, Yejun	203
Xing, Dikan	619
Xiong, Hui	827, 871
Xu, Gu	379
Xu, Hongtao	777
Xu, Jun	107
Xu, Shengliang	155
Xu, Wei	635
Xu, Yang	855

Xu, Zuobing .....	227, 427	Yu, Kai .....	635	Zhang, Yi .....	187
Xue, Gui-Rong .....	275, 619, 627	Yu, Yong .....	155, 275, 619, 627	Zhang, Ying .....	451
Xue, Xiaobing .....	475	Zaragoza, Hugo .....	857	Zhao, Qiankun .....	515
Yamasaki, Tomohiro .....	779	Zeng, Hua-Jun .....	179	Zhou, Chao .....	741
Yanagisawa, Yutaka .....	759	Zha, Hongyuan .....	275, 799	Zhou, Ke .....	275
Yang, Cheng-Zen .....	801	Zhai, ChengXiang .....	219, 611	Zhou, Wenjun .....	871
Yang, Jiang-Ming .....	459	Zhang, Dell .....	835	Zhou, Xiangdong .....	777
Yang, Jianwu .....	299	Zhang, Duo .....	611	Zhou, Xiaohua .....	555
Yang, Qiang .....	83, 179, 619, 627, 749	Zhang, Hong-Jiang .....	355	Zhu, Shenghuo .....	307, 635
Yang, Seungwon .....	889	Zhang, Kai .....	713	Zhu, Yangbo .....	715
Yang, Yiming .....	91	Zhang, Lei .....	355, 459	Zhuang, Ziming .....	515
Yasukawa, Michiko .....	880	Zhang, Liyan .....	713	Zighelnic, Liron .....	825
Ye, Xingyao .....	411	Zhang, Min .....	411	Zimmer, Christian .....	323
Yilmaz, Emine .....	587, 603, 667	Zhang, Wei .....	877	Zobel, Justin .....	51, 695, 731
Yokoo, Hidetoshi .....	880	Zhang, Xiaodan .....	555		