Arzucan Özgür

Dept. of Computer Engineering	*Phone*	+90 (212) 359–7226
Boğaziçi University	*E-mail*	arzucan.ozgur@boun.edu.tr
34342 Bebek, Istanbul, Turkey	*Url*	http://www.cmpe.boun.edu.tr/~ozgur/

RESEARCH INTERESTS

Natural language processing, information extraction, information retrieval, text mining, and bioinformatics.

EDUCATION

University of Michigan, Ann Arbor, Michigan   September 2006 – September 2010
Ph.D., Computer Science and Engineering
Advisor: Dragomir R. Radev
Thesis: "Text and Network Mining for Literature-Based Scientific Discovery in Biomedicine"

Boğaziçi University, İstanbul, Turkey   September 2002 – September 2004
M.S., Computer Engineering
Advisor: Ethem Alpaydın
Thesis: "Supervised and Unsupervised Machine Learning Techniques for Text Document Categorization"

Boğaziçi University, İstanbul, Turkey   September 1998 – July 2002
B.S., Computer Engineering

PROFESSIONAL EXPERIENCE

Boğaziçi University, İstanbul, Turkey   September 2011 – Present
Assistant Professor, Department of Computer Engineering

İstanbul Technical University, İstanbul, Turkey   October 2010 – August 2011
Instructor, Faculty of Computer and Informatics

Avaya Labs Research, Westminster, Colorado   June 2008 – August 2008
Research Intern, Multimedia Technologies Research Department

University of Michigan, Ann Arbor, Michigan   September 2006 – September 2010
Research Assistant,
Department of Electrical Engineering and Computer Science
National Center for Integrative Biomedical Informatics

Boğaziçi University, İstanbul, Turkey   September 2002 – July 2006
Teaching Assistant, Department of Computer Engineering

PUBLICATIONS

Patents

- George Erhart, Valentine Matula, Arzucan Ozgur, and David Skiba. System and Method for Generating Queries, United States Patent and Trademark Office (USPTO), US 8301619. Assigned to Avaya Inc., Basking Ridge, N.J. (US), October 2012.

Thesis

- Arzucan Özgür. "Text and Network Mining for Literature-Based Scientific Discovery in Biomedicine", Ph.D. Thesis, Computer Science and Engineering, University of Michigan, Ann Arbor, MI, USA, September 2010. Thesis Advisor: Dragomir R. Radev.
- Arzucan Özgür. "Supervised and Unsupervised Machine Learning Techniques for Text Document Categorization", M.S. Thesis, Computer Engineering, Boğaziçi University, İstanbul, Turkey, July 2004. Thesis Advisor: Ethem Alpaydın.

Refereed Journal Papers

[1] Saliha Durmus Tekir, Tunahan Cakr, Emre Ardc, Ali Semih Saylrbas, Gokhan Konuk, Mithat Konuk, Hasret Saryer, Azat Ugurlu, Ilknur Karadeniz, Arzucan Ozgur, F. Erdogan Sevilgen, and Kutlu O. Ulgen. PHISTO: Pathogen-Host Interaction Search Tool. Bioinformatics, Vol. 29 no. 10, pages 1357-1358, 2013.

[2] Junguk Hur, Arzucan Ozgur, Zuoshuang Xiang, and Yongqun He. Identification of fever and vaccine-associated gene interaction networks using ontology-based literature mining. Journal of Biomedical Semantics, 3:18, 2012.

[3] Y. Kano, J. Bjorne, F. Ginter, E. Buyko, U. Hahn, K. B. Cohen, K. Verspoor, C. Roeder, L. E. Hunter, H. Kilicoglu, S. Bergler, S. V. Landeghem, T. V. Parys, Y. V. de Peer, M. Miwa, S. Ananiadou, M. Neves, A.Pascual-Montano, A. Özgür, D. R. Radev, S. Riedel, R. Satre, H-W. Chun, J-D. Kim, S. Pyysalo, T. Ohta, and J. Tsujii. "U-Compare Bio-Event Meta-Service: Compatible BioNLP Event Extraction Services ", BMC Bioinformatics, 12:481, 2011.

[4] Arzucan Özgür, Zuoshuang Xiang, Dragomir R. Radev, and Yongqun He. "Mining of vaccine-associated IFN-gamma gene interaction networks using the Vaccine Ontology", Journal of Biomedical Semantics, 2(Suppl 2):S8, 2011.

[5] Arzucan Özgür, Zuoshuang Xiang, Dragomir R. Radev, and Yongqun He. "Literature-based discovery of IFN-gamma and vaccine-mediated gene interaction networks", Journal of Biomedicine and Biotechnology, vol. 2010, Article ID 426479, 2010.

[6] V. Glenn Tarcea, Terry Weymouth, Alex Ade, Jing Gao, Vasudeva Mahavisno, Zach Wright, Adriane Chapman, Magesh Jayapandian, Arzucan Özgür, Yuanyuan Tian, Jim Cavalcoli, Barbara Mirel, Jignesh Patel, Dragomir Radev, Brian Athey, David States, and H.V. Jagadish. "Michigan Molecular Interactions (MiMI) R2: From Interacting Proteins to Pathways", Nucleic Acids Research, 37 (Database Issue), D642-D646, 2009.

[7] Arzucan Özgür, Thuy Vu, Güneş Erkan, and Dragomir R. Radev. "Identifying gene-disease associations using centrality on a literature mined gene interaction network", Bioinformatics, Volume 24, Number 13, pp. i277-i285, 2008.

[8] F. Leitner, M. Krallinger, C. Rodriguez-Penagos, J. Hakenberg, C. Plake, C-J. Kuo, C-N. Hsu, R. T-H. Tasi, H-C. Hung, W. W. Lau, C. A. Johnson, R. Satre, K. Yoshida, Y. H. Chen, S. Kim, S-Y. Shin, B-T. Zhang, W. A. Baumgartner Jr., L. Hunter, B. Haddow, M. Matthew, X. Wang, P. Ruch, F. Ehrler, A. Özgür, G. Erkan, D. R. Radev, M. Krauthammer, T. Luong, R. Hoffmann, C. Sander, and A. Valencia. "Introducing Meta-Services for Biomedical Information Extraction", Genome Biology, 9(S2):S6, 2008.

[9] Arzucan Özgür, Burak Çetin, and Haluk Bingol. "Co-occurrence Network of Reuters News", International Journal of Modern Physics C (IJMPC), Volume 19, Issue 5, pp. 689-702, 2008.

[10] Arzucan Özgür and Taflan İ. Gündem. "Efficient Indexing Technique for XML-Based Electronic Product Catalogs", Electronic Commerce Research and Applications, Volume 5, Issue 1, pp. 66-77, Elsevier Science, 2006.

Refereed Conference and Workshop Papers

[11] Ilknur Karadeniz and Arzucan Ozgur. Bacteria Biotope Detection, Ontology-based Normalization, and Relation Extraction using Syntactic Rules. In Proceedings of BioNLP Shared Task 2013 Workshop, Sofia, Bulgaria, August, 2013. Association for Computational Linguistics.

[12] Nadin Kokciyan, Arda Celebi, Arzucan Ozgur, and Suzan Uskudarli. BOUNCE: Sentiment Classification in Twitter using Rich Feature Sets. In Proceedings of the International Workshop on Semantic Evaluation, SemEval13, Atlanta, Georgia, June, 2013.

[13] Cuneyd Murad Ozsert and Arzucan Ozgur. Word Polarity Detection using a Multilingual Approach. Proceedings of the Conference on Intelligent Text Processing and Computational Linguistics (CICLing), Samos, Greece, LNCS 7817, pp. 7582, Springer, 2013.

[14] Arda Celebi and Arzucan Ozgur. N-gram Parsing for Jointly Training a Discriminative Constituency Parser. Proceedings of the Conference on Intelligent Text Processing and Computational Linguistics (CICLing), Samos, Greece, 2013.

[15] Arzucan Özgür, Dragomir R. Radev, and Yongqun He. "Mining of vaccine-associated IFN-gamma gene interaction networks using the Vaccine Ontology", Proceedings of Bio-Ontologies 2010: Semantic Applications in Life Sciences, ISMB, Boston, MA, USA, July 9-10, 2010.

[16] Vahed Qazvinian, Dragomir R. Radev, and Arzucan Özgür. "Citation Summarization Through Keyphrase Extraction", In Proceedings of the 23rd International Conference on Computational Linguistics (COLING 2010), Beijing, China, August 23-27, 2010.

[17] Arzucan Özgür and Dragomir R. Radev. "Detecting Speculations and their Scopes in Scientific Text", In Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP'09), pages 1398-1407, Singapore, August 2009.

[18] Arzucan Özgür and Dragomir R. Radev. "Supervised classification for extracting biomedical events", In Proceedings of the BioNLP'09 Workshop Shared Task on Event Extraction at NAACL-HLT, Boulder, Colorado, USA, pages 111-114, June 2009.

[19] Güneş Erkan, Arzucan Özgür, and Dragomir R. Radev. "Semi-supervised classification for extracting protein interaction sentences using dependency parsing", In Proceedings of the Conference of Empirical Methods in Natural Language Processing (EMNLP '07), Prague, Czech Republic, June 28-30 2007.

[20] Güneş Erkan, Arzucan Özgür, and Dragomir R. Radev. "Extracting interacting protein pairs and evidence sentences by using dependency parsing and machine learning techniques", In Proceedings of the Second BioCreAtIvE Challenge Workshop - Critical Assessment of Information Extraction in Molecular Biology, Madrid, Spain, ISBN 84-933255-6-2, April 23-25 2007.

[21] Arzucan Özgür and Tunga Güngör. "Classification of Skewed and Homogenous Document Corpora with Class-Based and Corpus-Based Keywords", Lecture Notes in Artificial Intelligence, Vol. 4314, (Proc. of the 29th German Conference on Artificial Intelligence), pp. 91-101, Springer-Verlag, 2006.

[22] Arzucan Özgür, Levent Özgür, and Tunga Güngör. "Text Categorization with Class-Based and Corpus-Based Keyword Selection", Lecture Notes in Computer Science, Vol.3733, (Proc. of the 20th International Symposium on Computer and Information Sciences), pp. 607-616, Springer-Verlag, 2005.

[23] Arzucan Özgür and Haluk Bingol. "Social Network of Co-occurrence in News Articles", Lecture Notes in Computer Science, Vol. 3280, (Proc. of the 19th International Symposium on Computer and Information Sciences), pp. 688-697, Springer Verlag, 2004.

FUNDED PROJECTS

European Commission, FP7 Marie Curie International Reintegration Grant   2012-2016
Project name: Contextual Text Mining from the Biomedical Scientific Literature

Bogazici University Research Fund, BAP   2012-2013
Project name: Jointly Self-trained Parsers

CONTRIBUTED SOFTWARE PROJECTS

PHISTO (Pathogen-Host Interaction Search Tool)
http://www.phisto.org
Ignet (Integrated gene network)
http://ignet.hegroup.org
MIMI (Michigan Molecular Interactions)
http://mimi.ncibi.org

TEACHING EXPERIENCE

Boğaziçi University, İstanbul, Turkey   Fall 2011-Present
Assistant Professor, Department of Computer Engineering

- *CMPE 150 – Introduction to Computing (Java)* (Fall 2011, Spring 2012, Fall 2012)
- *CMPE 150 – Introduction to Computing (C)* (Spring 2013)
- *CMPE 59H – Bioinformatics* (Fall 2011, Fall 2012)
- *CMPE 59K – Information Retrieval* (Spring 2013)

Boğaziçi University, İstanbul, Turkey   Summer 2011
Visiting Instructor, Department of Computer Engineering

- *CMPE 493 – Introduction to Information Retrieval* (Summer 2011)

İstanbul Technical University, İstanbul, Turkey   Spring 2011-Sumer 2011
Instructor, Faculty of Computer and Informatics

- *BLG 381E – Advanced Data Structures* (Summer 2011)
- *BLG 252 – Object Oriented Programming* (Spring 2011)
- *BLG 540E – Text Retrieval Systems* (Spring 2011)

PROFESSIONAL ACTIVITIES

- Reviewer for the Journal of Bioinformatics and Computational Biology (JBCB), 2013.
- Program Committee for the TextGraphs-8, Workshop on Graph-based Methods for Natural Language Processing - EMNLP, 2013.
- Program Committee for IJCNLP 2013, The 6th International Joint Conference on Natural Language Processing, 2013.
- Program Committee for IEA-AIE 2013, The 26th International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, 2013.
- Local Committee, Language Resources and Evaluation (LREC), 2012.
- Program Committee for the Workshop on Language Resources and Technologies for Turkic Languages - LREC, 2012.
- Program Committee for the TextGraphs-7, Workshop on Graph-based Methods for Natural Language Processing - ACL, 2012.
- Reviewer for the Bioinformatics Journal, 2011, 2012.
- Reviewer for the BMC Systems Biology Journal, 2011.
- Reviewer for OMICS: A Journal of Integrative Biology, 2011.
- Program Committee for the System Demonstrations Program, Association for Computational Linguistics - ACL, 2010.
- Program Committee for the Workshop on "Negation and Speculation in Natural Language Processing", 2010.
- Program Committee for the CoNLL Shared Task, 2010.
- Reviewer for the Journal of the American Society for Information Science and Technology (JASIST), 2010.
- External Reviewer for Very Large Data Bases (VLDB) Journal Track, 2010.
- Reviewer for the Conference of the MidSouth Computational Biology and Bioinformatics - proceedings published in the journal of BMC Bioinformatics, 2009.
- Reviewer for the Conference on Empirical Methods in Natural Language Processing - EMNLP, 2008.
- Reviewer for the Computational Intelligence Journal, 2008.
- Reviewer for the Computer Journal, 2008.
- Reviewer for Soft Computing and Automation Journal (AutoSoft), 2007.
- Local Organizing Committee, International Symposium on Computer and Information Sciences (ISCIS) , 2005.