Oznur Tastan

Current Position

Assistant Professor at Sabanci University, Faculty of Engineering and Natural Sciences
Computer Science and Engineering Program
Molecular Biology, Genetics and Bioengineering Program

Contact Information

Sabanci Universitesi
FENS 2001
Tuzla, Istanbul, 34956, Turkey

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otastan@sabanciuniv.edu

Education

Carnegie Mellon University, Pittsburgh, PA, USA
Ph.D., School of Computer Science, Language and Information Technologies **2011**
Thesis Title: Prediction of Host-Virus Protein-Protein Interactions
Thesis Advisors: Profs. Jaime G. Carbonell and Judith Klein-Seetharaman
M.Sc., School of Computer Science, Language and Information Technologies (in parallel to Ph.D.) **2007**

Sabanci University, Istanbul, Turkey
B.Sc., Biological Sciences and Bioengineering **2004**

Research Interests

Computational biology, Bioinformatics, Machine learning.

Awards and Honors

Awarded Young Scientist Award 2014 (BAGEP 2014), The Science Academy of Turkey **2014**
Awarded UNESCO-L'Oreal National Women in Science Award **2013**
Awarded Research Fellowship, Carnegie Mellon University **2004 – 2010**
Awarded Travel Award, Pacific Symposium on Biocomputing Conference **2009**
Awarded Honor Fellowship, Sabanci University **1999 – 2004**
Awarded Haci Omer Sabanci Foundation Fellowship (monthly stipend), Turkey **1999 – 2004**
Awarded International Scholarship for overseas undergraduate education by the Ministry of National Education of the Republic of Turkey (declined) **1999**

Professional Experience

Assistant Professor **Dec 2017 – Present**
Sabanci University, Faculty of Engineering and Natural Sciences, Istanbul, Turkey
Assistant Professor **Sep 2012 –Dec 2017**
Bilkent University, Department of Computer Engineering, Ankara, Turkey
Post-doctoral Researcher **Aug 2010 – Jul 2012**
Microsoft Research New England, Cambridge, MA, USA
Graduate Research Assistant **Aug 2004 – 2010**
Language Technologies Institute, Carnegie Mellon University, Pittsburgh, PA, USA
Visiting Research Assistant **Jun 2003 – Sep 2003**
Department of Pharmacology, University of Pittsburgh
Undergraduate Research Assistant **Fall 2000 – Spring 2004**
Biological Sciences and Bioengineering Program, Sabanci University, Turkey

Teaching Experience

Instructor for CS680 Advanced Machine Learning (taught with B. Yanikoglu and H. Ozkan) **Spring 2018**
- Graduate level, Faculty of Engineering and Natural Sciences, Sabanci University

Instructor for DA514 Machine Learning (taught with Berrin Yanikoglu) **Spring 2018**
- Masters level, Data Analytics Programs, Sabanci University

Instructor for BIO310 Introduction to Bioinformatics **Spring 2018**
- Junior level, Faculty of Engineering and Natural Sciences, Sabanci University

Instructor for CS464 Introduction to Machine Learning **Fall 2014; Spring 2014, 2015, 2016, 2017**
- Senior level, Department of Computer Engineering, Bilkent University

Instructor for CS557 Computational Systems Biology **Fall 2015; Spring 2014, 2015**
- Graduate level, Department of Computer Engineering, Bilkent University

Instructor for CS102 Algorithms and Programming II **Fall 2014, 2015, 2016**
- Freshman level, Department of Computer Engineering, Bilkent University

Instructor for CS101 Algorithms and Programming I **Fall 2014**
- Freshman level, Department of Computer Engineering, Bilkent University

Instructor for CS114 Introduction to Programming for Engineers **Fall 2012; Spring 2013**
- Sophomore level, Department of Computer Engineering, Bilkent University

Coordinator for CS590/690 Research Seminar I/II **Fall 2013, 2014; Spring 2017**
- Senior level, Department of Computer Engineering, Bilkent University

Teaching Assistant for 10-601 Machine Learning Course **Fall 2009**

- Graduate level, Machine Learning Department, Carnegie Mellon University, instructed by Prof. Geoffrey Gordon and Dr. Miro Dudik

Teaching Assistant for Foundations of Molecular Biophysics III Course **Spring 2007**

- Graduate, Structural Biology Department, University of Pittsburgh, instructed by Profs. Sanford Leuba and Judith Klein-Seetharaman

Teaching Assistant for ENS210 Computational Biology Course **Spring 2003**

- Sophomore/junior level, Biological Sciences and Bioengineering Programme, Sabanci University, instructed by Prof. Osman U. Sezerman

Publications **Journal Publications, Peer-Reviewed Conference and Workshop Papers**

1. G. Kale, E. Ayday, and **O. Tastan** (2018). A utility maximizing and privacy preserving approach for protecting kinship in genomic databases, Bioinformatics, 34(2), 15, pp 181âĂŞ19.
2. I. Deznabi, M. MobayenJarihani, J. Nazanin, **O. Tastan** and E. Ayday (2017). An inference attack on genomic data using kinship, complex correlations and phenotype information. IEEE/ACM Transactions on Computational Biology and Bioinformatics, pp. 99, 1.
3. I. Deznabi, A. A. Celik and **O. Tastan**. MEMNAR: Finding mutually exclusive mutation sets through negative association rule mining. The 11th International Workshop on Machine Learning in Systems Biology, at the 25th ISMB/ECCB, Prag, Czech Republic, Jul 25, 2017.
4. M. Buyukozkan, H. I. Kuru and **O. Tastan**. Partially ordered expression features improves survival prediction in cancer. The 11th International Workshop on Machine Learning in Systems Biology, at the 25th ISMB/ECCB, Prag, Czech Republic, Jul 25, 2017.
5. B. Otlu, C. Firtina, S. Keles and **O. Tastan** (2017). GLANET: A tool for annotation and enrichment analysis of variable length genomic loci. Bioinformatics,33(18):2818-28.
6. C. Orhan and **O. Tastan**. ALEVS: Active learning by statistical leverage sampling. ICML Active Learning Workshop, 32nd International Conference on Machine Learning (ICML), Lille, France, Jul 6–11, 2015.
7. A. B. Unal and **O. Tastan**. Identification of cancer patient subgroups via smoothed shortest path graph kernel, NIPS Workshop on Machine Learning in Computational Biology, Barcelona, Dec 10, 2016.
8. C. Yao, B.H. Chen, R. Joehanes, B. Otlu, X. Zhang, C. Liu, T. Huan, **O. Tastan**, L. A. Cupples, J. B. Meigs, C. S. Fox, J.E. Freedman, P. Courchesne, C. J. O'Donnell, P. J. Munson, S. Keles and D. Levy (2015). Integrated analysis of genetic variation and gene expression identifies networks for cardiovascular disease phenotypes. Circulation. 131(6):536-49.
9. **O. Tastan**, Y. Qi, J.G. Carbonell and J. Klein-Seetharaman. Refining literature-curated HIV-1, human protein-protein interactions using expert opinions. Pacific Symposium on Biocomputing, Big Island of Hawaii, 318-29, Jan 2–9, 2015.
10. T. Jartti, O. Palomares, M, Waris, **O. Tastan**, R. Nieminen, T. Puhakka, B. Ruckert, A. Aab, T. Vuorinen, A. Tobias, T. Vahlberg, O. Ruuskanen, M. Akdis and C. Akdis (2014). Distinct regulation of tonsillar immune response in virus infections. Allergy. 69(5):658-67.
11. **O. Tastan**, A. Dutta, P. Booth and J. Klein-Seetharaman (2014). Retinal proteins as model systems for membrane protein folding. Biochimica et Biophysica Acta; 1837(5):656-63.
12. Z. Zhao, J. Xia, **O. Tastan**, I. Singh, M. Kshirsagar, J.G. Carbonell and J. Klein-Seetharaman (2011). Virus interactions with human signal transduction pathways. International Journal of Computational Biology and Drug Design. 4(1), p83-105.
13. S. Uguroglu, **O. Tastan**, J. Klein-Seetharaman and S.H. Leuba (2011). Identification of potentially relevant citeable articles using association rule mining. Medicinal Chemistry. 1:e101.
14. Y. Qi, **O. Tastan**, J.G. Carbonell, J. Klein-Seetharaman and J. Weston (2010). Semi-supervised multitask learning for predicting interactions between HIV-1 and human proteins. Bioinformatics, 26(18):645-52.
15. Singh, I, **O. Tastan** and J. Klein-Seetharaman (2010). Comparison of virus interactions with human signal transduction pathways. Proceedings ACM International Conference on Bioinformatics and Computational Biology, p17-24.
16. N.J. Venkatachari, T. Le, **O. Tastan**, M.D. Timothy, L. Walker, A. Ricciuti, N. Yanamala, A. Srinivasan, J. Klein-Seetharaman, M. Ramachandran, R.C. Montelaro and V. Ayyavoo (2010). Oligomerization of HIV-1 Vpr: Identification of essential domains/residues using structure based approaches and evaluation of its relevance to Vpr functions. Virology Journal, 7:119.

17. S. Balakrishnan, **O. Tastan** J.G. Carbonell and J. Klein-Seetharaman (2009). Alternative paths in HIV-1 targeted human signal transduction pathways. BMC Genomics 10 Suppl. 3, S30.
18. **O. Tastan**, J. Klein-Seetharaman and H. Meirovitch (2009). The effect of loops on the structural organization of alpha-helical membrane proteins. Biophysical Journal, 96:2299-312.
19. **O. Tastan**, E. Yu, M. Ganapathiraju, A. Aref, A.J. Rader and J. Klein-Seetharaman (2007). Comparison of stability predictions and simulated unfolding of rhodopsin structures. Photochemistry and Photobiology, 83:351-62.

Book Chapter

1. K. Hadi, **O. Tastan**, A. Srinivasan and V. Ayyavoo (2013). Human Immunodeficiency Virus (HIV-1) Vpr polymorphism and disease progression: Mutagenesis approach to study structure-function relationship of HIV-1 Vpr. Book Chapter in Genetic Manipulation of DNA and Protein - Examples from Current Research edited by David Figurski, InTech.

Selected Poster Presentations

- N. Eskici, **O. Tastan**, G. Olgun and Didem Dayangac-Erden. Physical interaction and gene expression analysis of perineuronal net elements in neuronal differentiation, EMBO Workshop on Functional Genetic Variation, Turin, Italy, 8–10 Sep 2017.
- G. Olgun, O. Sahin and **O. Tastan**, Discovering breast cancer subtype specific lncRNA mediated ceRNA interactions, 10th International Symposium on Health Informatics and Bioinformatics HIBIT 2017, Guzelyurt, Cyprus, Jun 28–30, 2017.
- I. Deznabi, A. A. Celik and **O. Tastan**. MEMNAR: Finding mutually exclusive mutation sets through negative association rule mining, the 11th International Workshop on Machine Learning in Systems Biology, Prag, Czech Republic, Jul 25, 2017.
- M. Buyukozkan, H. I. Kuru and **O. Tastan**. Partially ordered expression features improves survival prediction in cancer. The 11th International Workshop on Machine Learning in Systems Biology, Prag, Czech Republic, Jul 25, 2017.
- G. Kale and **O. Tastan**. Early diagnosis of cancer from volatile organic compounds, 11th Women in Machine Learning, Barcelona, Spain, Dec 5, 2016.
- D. Ozcelik and **O. Tastan**. A weakly supervised clustering method for cancer subgroup identification, 11th Women in Machine Learning, Barcelona, Spain, Dec 5, 2016.
- A. B. Unal and **O. Tastan**. Identification of cancer patient subgroups via smoothed shortest path graph kernel, NIPS Workshop on Machine Learning in Computational Biology, Barcelona, Dec 10, 2016.
- D. Ozcelik and **O. Tastan**. Partially supervised clustering for cancer subgroup identification, 9th International Symposium on Health Informatics and Bioinformatics HIBIT 2015, Mugla, Turkey, Oct 16–17, 2015.
- B. Otlu, S. Keles, **O. Tastan**. GLANET: Genomic loci annotation and enrichment tool, 13th European Conference of Computational Biology, Strasbourg, France, Sep 7–10, 2014.
- **O. Tastan**, Y. Qi, J.G. Carbonell and J. Klein-Seetharaman. Refining literature-curated HIV-1, human protein-protein interactions using expert opinions. 16th Annual International Conference on Research in Computational Molecular Biology RECOMB 2012, Barcelona, Spain, Apr 21–24, 2012.
- **O. Tastan**, Y. Qi, J.G. Carbonell and J. Klein-Seetharaman. Estimating confidence in the HIV-1, human protein interactome given expert labels. The 23rd Annual Meeting of the Groups Studying the Structures of AIDS-Related Systems and their Application to Targeted Drug Design, Satellite Session, Bethesda, Maryland, USA, Jun 25–26, 2009.
- **O. Tastan**, J. Klein-Seetharaman and H. Meirovitch. The effect of loops on the structural organization of alpha-helical membrane proteins. 3Dsig: Structural Bioinformatics and Computational Biophysics an ISMB Satellite Meeting, Stockholm, Sweden, Jun 27–28, 2009.
- **O. Tastan**, E. Yu, A.J. Rader and J. Klein-Seetharaman. Comparison of simulated unfolding of membrane protein structures. 51st Annual Meeting of the Biophysical-Society, Baltimore, MD, USA, Mar 3–7, 2007.

Selected Talks

- Middle East Technical University, Informatics Institute, Apr 24, 2017, Ankara, Turkey (Invited talk).
- MINE Project Research group, Prof. Nazli Basak Lab and Genomize, Apr 14, 2017, Istanbul, Turkey (Invited talk).
- Hacettepe University, Medical Biology Department, Dec 6, 2016, Ankara, Turkey (Invited talk).
- Tibbi Genetik Dernegi 12. Ulusal Tibbi Genetik Kongresi, 5–9 Oct 2016, Cesme, Turkey (Invited talk).
- Bilkent University, Electrical Engineering Department, EEE 591/592 Seminar, Apr 22, 2016, Ankara, Turkey (Invited talk).
- Bilkent University, Molecular Biology and Genetics, Mar 23, 2016, Ankara, Turkey (Invited talk).
- 14th National Congress in Clinical Biology and Medical Genetics, Oct 22, 2015, Mugla, Turkey (Invited talk).

- 20th International Conference of Machine Learning, Jul 5–10, 2015, Lille, France (Contributed talk).
- 22nd Statistical Physics Days, Istanbul Technical University, Jun 25, 2015, Istanbul, Turkey (Invited talk).
- 20th Pacific Symposium on Biocomputing, Jan 2–9, 2015, Big Island of Hawaii, USA.
- Hacettepe University, Medical Biology Department, Feb 14, 2014, Ankara, Turkey (Invited talk).
- Turkish Scientific and Research Council, Bioinformatics Summer School for High School Students, Sep 6, 2013, Istanbul, Turkey (Invited lecturer).
- Bilkent University, Molecular Biology and Genetics, Apr 24, 2013, Ankara, Turkey (Invited talk).
- Middle East Technical University, Computer Engineering Department, May 8, 2012, Ankara, Turkey (Invited talk).
- Istanbul Technical University, Computer Engineering Department, May 4, 2012, Istanbul, Turkey (Invited talk).
- Bilkent University, Computer Engineering Department, May 2, 2012, Ankara, Turkey (Invited talk).
- Sabanci University, Computer Science Seminar Series, Apr 26, 2012, Istanbul, Turkey (Invited talk).
- Microsoft Research TechFest, March 6-9, 2012, Redmond, WA, USA (Demo).
- Bioengineering Department, MIT, February 22, 2012 (Invited talk).
- 9th Annual Rocky Mountain Bioinformatics Conference, Aspen, Colorado, USA, Dec 11, 2011 (Talk)
- Learning Workshop, Clearwater, Florida, USA, Apr 13-16, 2009.
- The 23rd Annual Meeting of the Groups Studying the Structures of AIDS-Related Systems and their Application to Targeted Drug Design, Satellite Session, Bethesda, Maryland, USA, Jun 25-26, 2009 (Talk).
- 3Dsig: Structural Bioinformatics and Computational Biophysics an ISMB Satellite Meeting, Stockholm, Sweden, Jun 27-28, 2009 (Contributed talk).
- VIII European Symposium of the Protein Society, Zurich, Switzerland, Jun 14-18, 2009
- Molecular Biophysics and Structural Biology Data & Literature Club, Department of Structural Biology, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA, Apr 9, 2008 (Invited talk)
- 52nd Annual Meeting of the Biophysical Society, Long Beach, California, USA, 2008,
- 21nd Annual Symposium of the Protein Society, Boston, Massachusetts, USA, 2007.

Student Supervision

Current Graduate Students (Ph.D.)

- **Gulden Olgun**, Department of Computer Engineering, Bilkent University, Ankara, 9/2013 – Present

Current Graduate Students (M.Sc.)

- **Onur Can Uner**, Department of Computer Engineering, Bilkent University, Ankara, 9/2016 – Present
- **Iman Deznabi**, Department of Computer Engineering, Bilkent University, Ankara, 9/2015 – Present
- **Mustafa Furkan Demir**, Department of Computer Engineering, Bilkent University, Ankara, 9/2015 – Present
- **Halil Ibrahim Kuru**, Department of Computer Engineering, Bilkent University, Ankara, 2/2016 – Present

Current Undergraduate Volunter Students (M.Sc.)

- **Ali Atli**, Department of Computer Engineering, Bilkent University, Ankara, 6/2017 – Present
- **Onur Kulaksizoglu**, Department of Computer Engineering, Bilkent University, Ankara, 1/2017 – Present
- **Taha Aksu**, Department of Computer Engineering, Bilkent University, Ankara, 1/2017 – Present
- **Alparslan Celik**, Department of Computer Engineering, Bilkent University, Ankara, 9/2015 – Present
- **Irem Ergun**, Department of Computer Engineering, Bilkent University, Ankara, 2/2017 – Present

Graduate Students (P.hD. Alumni)

- **Burcak Otlu**, Department of Computer Engineering, METU, Ankara, co-supervised with Prof. Sunduz Keles, Prof. Tolga Can, 3/2013 – 7/2017.

Graduate Students (M.Sc. Alumni)

- **Ali Burak Unal**, Department of Computer Engineering, Bilkent University, graduated in Feb 2017.
  Thesis title: "Identification of Cancer Patient Subgroups via Pathway Based Multi-View Graph Kernel Clustering"
  Current position: PhD Student, Methods in Medical Informatics, Department of Computer Science, University of TÃijbingen.
- **Gulce Kale**, Department of Computer Engineering, Bilkent University, graduated in Feb 2017.
  Thesis title: "A Utility Maximizing and Privacy Preserving Approach for Protecting Kinship in Genomic Databases"
  Current position: Data Scientist, Chatterbox Labs, London, UK.
- **Duygu Ozcelik**, Department of Computer Engineering, Bilkent University, graduated in Jun 2015 – Present
  Thesis title: "A Weakly Supervised Clustering Method for Cancer Subgroup Identification"

Current position: Software Engineer, HAVELSAN, Ankara, Turkey.

- **Cem Orhan**, Department of Computer Engineering, Bilkent University, graduated in Jul 2015.
  Thesis title: "Active Learning Methods based on Statistical Leverage Scores"
  Current position: Ph.D. student in School of Computer and Communication Sciences, Ecole Polytechnique Federale Lausanne, Lausanne, Switzerland.
- **Mustafa Buyukozkan**, Department of Computer Engineering, Bilkent University, graduated in Apr 2015.
  Thesis title: "Survival Prediction via Partial Ordering in Feature Space and Sample"
  Current position: Ph.D. student in Institute of Computational Biology, Helmholtz Zentrum Muenchen, Munich, Germany

Independent Undergraduate Researchers (Alumni)

- **Ali Kavis**, Department of Computer Engineering, Bilkent University, Ankara, 9/2015 – 9/2017
- **Can Firtina**, Deparment of Computer Engineering, Bilkent University, 3/2014 – 4/2015.
- **Dorukhan Arslan**, Deparment of Computer Engineering, Bilkent University, 2/2015 – 5/2015.
- **Ugurcan Yildirim**, Deparment of Computer Engineering, Bilkent University, 2/2015 – 5/2015.
- **Ahmet Kucuk**, Deparment of Computer Engineering, Bilkent University, 1/2014 – 5/2014.
- **Baturay Kaya**, Computer Science Programme, Sabanci University, 6/2014 – 9/2014.
- **Burak Yucesoy**, Department of Computer Engineering, Bilkent University, 9/2013 – 1/2014.

Thesis Committees (Current)

- **Muhammad Waqas Akbar**, Ph.D. candidate, Bilkent University, Molecular Biology and Genetics, Ankara, Turkey, since 2016. Advisor: Ali Gure.
- **Huma Shehwana**, Ph.D. candidate, Bilkent University, Molecular Biology and Genetics, Ankara, Turkey, since 2016. Advisor: Ozlen Konu.
- **Onur Erdogan**, Ph.D. candidate, Middle East Technical University, Graduate School of Informatics, Ankara, Turkey, since 2016. Advisor: Yesim Aydin Son.
- **Burcak Otlu**, Ph.D. candidate, Middle East Technical University, Department of Computer Engineering, Ankara, Turkey, since 2013. Advisor: Tolga Can.
- **Sitar Kortik**, Ph.D. candidate, Bilkent University, Department of Computer Engineering, Ankara, Turkey, since 2012. Advisor: Uluc Saranli.

Thesis Committees (Alumni)

- **Deniz Katircioglu**, M.Sc., Middle East Technical University, Health Informatics, completed in May 2017. Advisor: Nazife Baykal
- **Poyraz Umut Hatipoglu**, M.Sc., Middle East Technical University, Biomedical Engineering, completed in Jan 2016. Advisor: Cem Iyigun
- **Gokhan Ersoy**, M.Sc., Middle East Technical University, Health Informatics, completed in Jun 2015. Advisor: Yesim Aydin Son
- **Ekin Kantar Ozcirpan**, M.Sc., Middle East Technical University, Biomedical Engineering, completed in Jan 2015. Advisor: Gerhard-Wilhelm Weber
- **Marzie E. Rakesh**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Jul 2015. Advisor: Can Alkan
- **Ahmet Iscen**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Aug 2014. Advisor: Pinar Duygulu Sahin
- **Eren Golge**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Aug 2014. Advisor: Pinar Duygulu Sahin
- **Melik Berkan Ercan**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Aug 2014. Advisor: H. Altay Guvenir
- **Begum Genc**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Jul 2014. Advisor: Ugur Dogrusoz
- **Can Cagdas Cengiz**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Jul 2014. Advisor: Ugur Dogrusoz
- **Elif Eser**, M.Sc, Department of Computer Engineering, Bilkent University, completed in Aug 2013. Advisor: Hakan Ferhatosmanoglu
- **Azer Aylin Acikgoz**, M.Sc, Department of Molecular Biology and Genetics, Bilkent University, completed in Jul 2013. Advisor: Ozlen Konu
- **Utku Sirin**, M.Sc, Department of Computer Engineering, Middle East Technical University, completed in Jul 2013. Advisor: Faruk Polat
- **Fadime Sener**, M.Sc, Department of Computer Engineering, Bilkent University, completed in Jul 2013. Advisor: Pinar Duygulu Sahin
- **Yigit Caliskan**, M.Sc, Department of Computer Engineering, Bilkent University, completed in May

2013. Advisor: Pinar Duygulu Sahin
- **Elif Dal**, M.Sc., Department of Computer Engineering, Bilkent University, Ankara, Turkey, completed in Dec 2014. Advisor: Can Alkan

Senior Project Supervision
- Alp Guvenir, Murat Deniz Parmaksiz and Turgay Arda Usman. *Project Apollo*, Senior Design Project (CS491-492), in progress.
- Begum Akbay, Osman Hakan Can and Muge Tetik. *Clewear*, Senior Design Project (CS491-492), completed in May, 2015.
- Ayhun Tekat, Mustafa Iman, Can Firtina and Ali Yesilyaprak. *Emotion Engine*, Senior Design Project (CS491-492), completed in May , 2015 (Received Sibel Ozelci Best Senior Design Project Award).
- Omer Caner Akbaba, Kadir Turker Gulsoy, Ertac Guney and Can Oncel. *Techno-Analyzer*, Senior Design Project (CS491/492), completed in May 2014.
- Abdullah Yilmaz, Burcu Suerdem, Ahmet Can Ersoz, Erman Gozu, Osman Baris Karaogen and Ceren Uzun, *Data Mining Study to Determine Profitable New Store Locations in Ankara Region*, Senior Project (IE477-478), completed in May 2014.
- Burhan Eyuboglu, Ali Kabatas, Huseyin Oner, Esat Ridvan Kavgaoglu and Emre Siranli. *Demijohn*, Senior Project (CS491/492), completed in May 2013.

Research Grants
- Scientific and Technical Research Council of Turkey (TUBITAK-3501-117E140), *Discovering Cancer Patient Subgroups with Functional Graph Kernels*, PI, 2017- Present.
- Scientific and Technical Research Council of Turkey (TUBITAK-1001-213E036), *Early Diagnosis of Colorectal Cancer with Nanoelectromechanical Systems*, Researcher, 2014–2016.

Academic Service

University Service
- CSFair Organization Comitte, Fall 2012 – Spring 2017
- Student Performance Evaluation Comitttee, Spring 2016 – Fall 2017
- Member of Women In Machine Learning, Dec 2016 – Present.

Conference Comittees
- Publicity Chair, The 8th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB), Aug 20-23, 2017, Boston, MA, USA.
- Program Committee Member, 10th International Symposium on Health Informatics and Bioinformatics HIBIT 2017, Jun 28-30, 2017, Guzelyurt, Cyprus.
- Program Committee Member, 8th Conference on High Throughput Sequencing Analysis and Algorithms (HiTSeq2017), Jul 21-25, 2017, Prag, Czech Republic.
- Program Committee Member, IEEE International Workshop on Machine Learning for Signal Processing, Sep 17-20, 2015, Boston, USA.
- Scientific Committee Member, 9th International Symposium on Health Informatics and Bioinformatics HIBIT 2015, Oct 16-17, 2015, Mugla, Turkey.
- Organizer, Computational Aspects of Biological Information 2010, Cambridge, Dec 9, 2010, MA, USA.

Study Sections
- Turkiye Genom Projesi Hazirlik Calistayi, Istanbul, Turkey, Feb12-13, 2016.
- Turkiye Genom Projesi Bioinformatik Altgrubu Hazirlik Calistayi, Ankara, Turkey, Jun 14, 2016.
- Hacettepe Universitesi, Ar-Ge Strateji Belgesi Hazirlanmasi Molekuler Tip Alani Calistayi, Dec 6, 2016, Ankara, Turkey.

Reviewer
- Bioinformatics, Journal of Artificial Intelligence in Medicine, Turkish Journal of Electrical Engineering and Computer Sciences, BMC Evolutionary Biology, Academic Platform Journal of Engineering and Science, ISMB/ECCB, HIBIT, NIPS Computational Biology Workshop, Women In Machine Learning.

Other
- External Stakeholders Committee Member, Computer Science and Engineering Program, Sabanci University Turkey, 2014– 2017.
- Jury Member for Serhat Ozyar Yilin Genc Bilim Insani Thesis Award.

Languages English (advanced), Turkish (native).