

Safiye Celik

safiye@cs.washington.edu
+1 206 359 1781
<http://homes.cs.washington.edu/~safiye/>

Paul G. Allen School of Computer Science & Engineering
University of Washington
185 Stevens Way, Seattle, WA 98195-2350

EDUCATION

Ph.D. in Computer Science & Engineering, University of Washington (2012 – 2018 exp.)

Granted M.S. degree in 2014, Ph.D. candidacy in 2016.

Thesis: High-dimensional machine learning techniques for integrative analysis of heterogeneous molecular data

Advisor: Su-In Lee

M.S. in Computer Engineering, Bogazici University, Turkey (2010 – 2012)

Thesis: Biclustering using nonparametric Bayesian methods

Advisor: Ali Taylan Cemgil

B.S. in Computer Engineering, Middle East Technical University, Turkey (2002 –2007)

Graduated with Dean's High Honors, ranking 6th among 171 graduates.

Senior Thesis: A Unified News Exchange Server with NNTP, Mail, Web and RSS

PROFESSIONAL EXPERIENCE

Research Assistant, University of Washington Computer Science & Engineering (2012 – Present)

Designing and developing machine learning algorithms for structure learning of high-dimensional graphical models.

Researcher, Scientific and Technological Research Council of Turkey (2010 – 2012)

Designed and developed pattern recognition algorithms for knowledge extraction from huge spatio-temporal databases.

Software Engineer, MilSOFT Software Technologies Inc. (2007 – 2010)

Designed and developed algorithms for automatic analysis and enhancement of the images captured by the Turkish Unmanned Air Vehicle.

Designed and developed a compiler/parser system for the NATO Message Handling System (MHS) for search & rescue ship communications.

SELECTED HONORS AND AWARDS

AAUW International Doctoral Fellowship (2013-2014) (Acceptance rate 7%)

One of the 50 international graduate students awarded by the American Association of University Women. The only fellow pursuing Computer Science PhD.

Participant in the Machine Learning Summer School (2013) (Acceptance rate 26%)

One of the 100 participants selected to attend the 2-week ML summer school in Tubingen, Germany and take classes taught by several distinguished ML researchers including Christopher Bishop and Zoubin Ghahramani.

TUBITAK Graduate Fellowship (2010-2012)

Awarded by the Scientific and Technological Research Council of Turkey to pursue M.Sc. studies. This fellowship is comparable to the NSF Graduate Fellowship.

TEV Scholarship (1999-2007)

Awarded by the Turkish Educational Foundation to the exceptional high school and undergraduate students.

3rd place among over 1.5 million participants in the University Entrance Exam of Turkey (2002)

PUBLICATIONS

Su-In Lee*, Safiye Celik*, Benjamin A Logsdon, Scott M. Lundberg, Timothy J Martins, Vivian G Oehler, Elihu H Estey, Chris P Miller, Sylvia Chien, Akanksha Saxena, Anthony Blau and Pamela S Becker, "A machine learning approach to integrate big data for precision medicine in acute myeloid leukemia", in press at Nature Communications. (* means equal contribution)

Safiye Celik, Benjamin A Logsdon, Stephanie Battle, Charles W Drescher, Mara Rendi, David Hawkins and Su-In Lee (2016), "Extracting a low-dimensional description of multiple gene expression datasets reveals a potential driver for tumor-associated stroma in ovarian cancer", Genome Medicine. (Impact factor 7.07).

Safiye Celik, Benjamin A Logsdon and Su-In Lee (2014), "Efficient Dimensionality Reduction for High-Dimensional Network Estimation", International Conference on Machine Learning (ICML), Beijing, China. (Acceptance rate 22%).

Safiye Celik, Benjamin A Logsdon and Su-In Lee (2013), "Sparse Estimation of Module Gaussian Graphical Models with Applications to Cancer Systems Biology", NIPS Workshop on Machine Learning in Computational Biology (MLCB), Lake Tahoe, OR. (Acceptance rate 20%).