

Asst. Prof. Zeyneb KURT

Personal Information

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International Researcher IDs

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Education Information

Post Doctorate, University of California, Los Angeles, Integrative Biology and Physiology, United States Of America 2015 - 2018

Post Doctorate, The Private University for Health Sciences, Medical Informatics and Technology , Austria 2014 - 2014

Doctorate, Yildiz Technical University, Faculty Of Electrical & Electronics, Computer Engineering, Turkey 2007 - 2013

Postgraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Computer Engineering, Turkey 2005 - 2007

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Computer Engineering, Turkey 2001 - 2005

Foreign Languages

English, C1 Advanced

Research Areas

Computer Sciences, algorithms, Computer Vision, bioinformatics, Database and Data Structures, Artificial Intelligence, Computer Learning and Pattern Recognition, Software, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Computer Engineering, 2018 - Continues

Other, University of California, Los Angeles, Integrative Biology And Physiology, Integrative Biology And Physiology - Yang Lab, 2015 - 2018

Research Assistant PhD, Yildiz Technical University, Elektrik Elektronik , Bilgisayar Muhendisligi, 2013 - 2018

Other, --Seçiniz--, Umit (Private Universität Für Gesundheitswissenschaften, Medizinische Informatik Und Technik), Biomedical Computer Science And Mechatronics, 2014 - 2014

Research Assistant, Yildiz Technical University, Elektrik Elektronik , Bilgisayar Muhendisligi, 2005 - 2013

Academic and Administrative Experience

Erasmus Coordinator, Yildiz Technical University, Faculty of Electrical & Electronics, Computer Engineering, 2018 - Continues

Orientation committee member, Yildiz Technical University, Faculty of Electrical & Electronics, Computer Engineering, 2012 - 2015

Courses

Discrete Mathematics and Combinatorics, Postgraduate, 2019 - 2020, 2018 - 2019

Structured Programming, Undergraduate, 2019 - 2020, 2018 - 2019

Introduction to Bioinformatics, Undergraduate, 2019 - 2020

Numerical Analysis, Undergraduate, 2018 - 2019

Statistical Data Analysis, Undergraduate, 2018 - 2019

Discrete Mathematics, Undergraduate, 2019 - 2020, 2018 - 2019

Seminar, Undergraduate, 2018 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The Genetic Architecture of Diet-Induced Hepatic Fibrosis in Mice**
Hui S. T., Kurt Z., Tuominen I., Norheim F., Davis R. C., Pan C., Dirks D. L., Magyar C. E., French S. W., Krishnan K. C., et al.
HEPATOLOGY, vol.68, pp.2182-2196, 2018 (SCI-Expanded)
- II. **Tissue-specific pathways and networks underlying sexual dimorphism in non-alcoholic fatty liver disease**
Kurt Z., Barrere-Cain R., Laguardia J., Mehrabian M., Pan C., Hui S. T., Norheim F., Zhou Z., Hasin Y., Lusis A. J., et al.
BIOLOGY OF SEX DIFFERENCES, vol.9, 2018 (SCI-Expanded)
- III. **The Memory of Environmental Chemical Exposure in *C. elegans* Is Dependent on the Jumonji Demethylases jmjd-2 and jmjd-3/utx-1**
Camacho J., Truong L., Kurt Z., Chen Y., Morselli M., Gutierrez G., Pellegrini M., Yang X., Allard P.
CELL REPORTS, vol.23, pp.2392-2404, 2018 (SCI-Expanded)
- IV. **Integration of Multi-omics Data from Mouse Diversity Panel Highlights Mitochondrial Dysfunction in Non-alcoholic Fatty Liver Disease**
Krishnan K. C., Kurt Z., Barrere-Cain R., Sabir S., Das A., Floyd R., Vergnes L., Zhao Y., Che N., Charugundla S., et al.
CELL SYSTEMS, vol.6, pp.103-122, 2018 (SCI-Expanded)
- V. **Estimation of the proteomic cancer co-expression sub networks by using association estimators**
Erdogan C., Kurt Z., Diri B.
PLOS ONE, vol.12, 2017 (SCI-Expanded)
- VI. **Shared genetic regulatory networks for cardiovascular disease and type 2 diabetes in multiple populations of diverse ethnicities in the United States**
Shu L., Chan K. H. K., Zhang G., Huan T., Kurt Z., Zhao Y., Codoni V., Tregouet D., Consortium C., Yang J., et al.
PLOS GENETICS, vol.13, 2017 (SCI-Expanded)
- VII. **Applications and Limitations of Mouse Models for Understanding Human Atherosclerosis**
Von Scheidt M., Zhao Y., Kurt Z., Pan C., Zeng L., Yang X., Schunkert H., Lusis A. J.
CELL METABOLISM, vol.25, pp.248-261, 2017 (SCI-Expanded)
- VIII. **Mergeomics: multidimensional data integration to identify pathogenic perturbations to biological systems**
Shu L., Zhao Y., Kurt Z., Byars S. G., Tukiainen T., Kettunen J., Orozco L. D., Pellegrini M., Lusis A. J., Ripatti S., et al.
BMC GENOMICS, vol.17, 2016 (SCI-Expanded)
- IX. **Comprehensive review of association estimators for the inference of gene networks**
Kurt Z., Aydin N., Altay G.

- TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, pp.695-750, 2016 (SCI-Expanded)
- X. **Structural Analysis of Treatment Cycles Representing Transitions between Nursing Organizational Units Inferred from Diabetes**
 Dehmer M., Kurt Z., Emmert-Streib F., Them C., Schulc E., Hofer S.
 PLOS ONE, vol.10, 2015 (SCI-Expanded)
- XI. **A comprehensive comparison of association estimators for gene network inference algorithms**
 Kurt Z., Aydin N., Altay G.
 BIOINFORMATICS, vol.30, pp.2142-2149, 2014 (SCI-Expanded)
- XII. **Netmes: Assessing Gene Network Inference Algorithms by Network-Based Measures**
 Altay G., Kurt Z., Dehmer M., Emmert-Streib F.
 EVOLUTIONARY BIOINFORMATICS, vol.10, pp.1-9, 2014 (SCI-Expanded)
- ### Books & Book Chapters
- I. **Linear Discriminant Analysis in Ottoman Alphabet Character Recognition**
 KURT Z., TÜRKMEN ÇİLİNGİR H. İ., KARSLIGİL YAVUZ M. E.
 in: Lecture Notes in Electrical Engineering: Proceedings of the European Computing Conference 2007, Mastorakis N., Mladenov V., Kontargyri V., Editor, Springer-Verlag , Atina, pp.601-607, 2009
- ### Refereed Congress / Symposium Publications in Proceedings
- I. **The Co-expression measures' Effect on the Integration of Proteomic and Gene Expression Data for Gene Regulatory Network Inference Methods**
 Erdogan C., Kurt Z., Diri B.
 2nd International Conference on Mathematical Advancers and Applications, İstanbul, Turkey, 03 May 2019, pp.1
- II. **Cross-species Comparison of Genetic Networks of Coronary Artery Disease**
 KURT Z., Barrere-Cain R. E., Sun C., Zhao Y., Pan C., Ruusalepp A., Franzén O., Koplev S., Björkegren J. L., Lusis A. J., et al.
 Vascular Discovery: From Genes to Medicine Scientific Sessions, San Francisco, United States Of America, 09 May 2018, pp.1
- III. **Multi-omics integration to understand sexual dimorphic mechanisms in non-alcoholic fatty liver disease**
 KURT Z., Barrere-Cain R., Pan C., Hui S., Lusis A. J., Yang X.
 Cell Symposia: Metabolic Disease Therapies, San Diego, United States Of America, 15 October 2017, pp.1
- IV. **An Analysis of the Association Estimators in Biological Network Inference Algorithms on Glioblastoma Multiforme Proteomic Data**
 Erdogan C., KURT Z., DİRİ B.
 International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 03 July 2017, pp.1-5
- V. **Investigation of association estimators in network inference algorithms on breast cancer proteomic data Ağ Çıkarım Algoritmalarındaki İlişki Tahmincilerinin Meme Kanseri Proteomik Verileri Üzerinde İncelenmesi**
 Erdogan C., KURT Z., DİRİ B.
 25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 May 2017
- VI. **Ağ Çıkarım Algoritmalarındaki İlişki Tahmincilerinin Meme Kanseri Proteomik Verileri Üzerinde İncelenmesi**
 Erdogan C., KURT Z., DİRİ B.
 IEEE 25. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Antalya, Turkey, 15 May 2017, pp.1-5
- VII. **Assessing the Biological Consistency in Atherosclerosis Susceptibility Genes Between Mouse and**

Human Genetic Studies

Zhao Y., KURT Z., Schunkert H., Yang X., Lusis A. J.

American Heart Association (AHA) Arteriosclerosis, Thrombosis and Vascular Biology/Peripheral Vascular Disease (ATVB/PVD), 01 May 2016

- VIII. **Integration of Aorta Network Models from Mouse Ath-HMDP with Human GWAS Reveals Novel Mechanisms of Coronary Artery Disease**

KURT Z., Bennett B. J., Davis R. C., Pan C., Zhao Y., Codoni V., Trégouët D., Zhang B., Lusis A. J., Yang X.

American Heart Association (AHA) Arteriosclerosis, Thrombosis and Vascular Biology/Peripheral Vascular Disease (ATVB/PVD), 01 May 2016

- IX. **Impacts of the Different Spline Orders on the B-spline Association Estimator**

KURT Z., AYDIN N., ALTAY G.

13th IEEE International Conference on BioInformatics and BioEngineering (BIBE), 01 November 2013

- X. **Influence of the Copula Transform on the Association Estimators for Gene Network Inference**

KURT Z., AYDIN N., ALTAY G.

International Conference on Applied Informatics for Health and Life Sciences (AIHLS), 01 September 2013

- XI. **Comparison of Several Classification Algorithms for Gender Recognition from Face Images**

Yanbol F., KURT Z.

IEEE 16th International Conference on Intelligent Engineering Systems 2012, 01 June 2012

- XII. **A Comparison of EKF, UKF, FastSLAM2.0, and UKF-based FastSLAM Algorithms**

Kurt Yavuz Z., Kurt Yavuz Z.

IEEE 16th International Conference on Intelligent Engineering Systems INES 2012, 01 June 2012

- XIII. **Improvement of the Measurement Update Step of EKF-SLAM**

Kurt Yavuz Z., Kurt Yavuz Z.

IEEE 16th International Conference on Intelligent Engineering Systems INES 2012, 01 June 2012

- XIV. **Erkek ve Kadın Yüzünü Ayırt Etmede Özellik Çıkarımı ve Özellik Seçimi Yöntemlerinin Kullanılması**

Kaymakcioglu U., KURT Z.

Sinyal İşleme Uygulamaları (SİU), 01 April 2011

- XV. **Renkli Resimlerin Kayıplı Sıkıştırılmasında Farklı renk Uzaylarının Etkisi**

Böke S. B., DİRİ B., KURT Z.

18. Sinyal İşleme ve Uygulama Kurultayı, Diyarbakır, Turkey, 22 April 2010, pp.1-5

- XVI. **Linear discriminant analysis in Ottoman alphabet character recognition**

KURT Z., Turkmen H. I., Karşılıklı M. E.

European Computing Conference, Athens, Greece, 25 - 27 September 2007, pp.601-607

- XVII. **Simultaneous localization and mapping using extended Kalman filter Genişletilmiş Kalman滤resi yöntemine dayalı eş zamanlı konum belirleme ve haritalama algoritması**

Yavuz S., Kurt Z., Biçer M. S.

2009 IEEE 17th Signal Processing and Communications Applications Conference, SIU 2009, Antalya, Turkey, 9 - 11 April 2009, pp.700-703

- XVIII. **Simultaneous Localization and Mapping Using Extended Kalman Filter**

YAVUZ S., Kurt Z., Bicer M. S.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.914-917

- XIX. **A simultaneous localization and map building algorithm based on Sequential Monte Carlo method**

Sıralı Monte Carlo yöntemine dayalı eş zamanlı konum belirleme ve haritalama algoritması

Kurt Z., Yavuz S.

2008 IEEE 16th Signal Processing, Communication and Applications Conference, SIU, Aydın, Turkey, 20 - 22 April 2008

- XX. **Öznitelik Seçimi Yöntemlerinin Kıyaslaması**

KURT Z., Karşılıklı M. E.

Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU), 01 June 2008

- XXI. **Makine Öğrenmesine Dayalı Çeşitli Spam Filtresi Yöntemlerinin Kıyaslaması**

- KURT Z., Alpaydın E.
 Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU), 01 June 2008
- XXII. Global Feature Based Female facial Beauty Decision System**
 TÜRKMEN ÇİLİNGİR H. İ., KURT Z., KARSLIGİL YAVUZ M. E.
 The 15th European Signal Processing Conference - 2007, Poznan, Poland, 03 September 2007, pp.1945-1949
- XXIII. Linear Discriminant Analysis in Ottoman Alphabet Character Recognition**
 KURT Z., Turkmen H. İ., Karşılıgil M. E.
 European Computer Conference-ECC, (Lecture Notes in Electrical Engineering, 2009), 01 September 2007
- XXIV. DAA Yöntemi ile Osmanlıca Karakter Tanıma**
 KURT Z., Türkmen H. İ., Karşılıgil M. E.
 Sinyal İşleme Uygulamaları (SİU), 01 June 2007
- XXV. Türk İşaret Dili Yüz İfadesi ve Baş Hareketi Veritabanı**
 Arı İ., Güvensan A., Haberdar H., KURT Z., Türkmen İ., Uyar A., Akarun L.
 Sinyal İşleme Uygulamaları (SİU), 01 June 2007
- XXVI. Türk İşaret Diline Yönelik Yüz İfadesi ve Kafa Hareketi Tanıma Sistemi**
 KURT Z., Uyar A., Türkmen H. İ.
 Sinyal İşleme Uygulamaları (SİU), 01 June 2007
- XXVII. Eş Zamanlı Konum Belirleme ve Harita Oluşturma Amaçlı Otonom Bir Robot**
 Yavuz S., Amasyali M. F., Balcılar M., Bilgin G., Dinç T., Kurt Yavuz Z.
 Elektrik Elektronik Bilgisayar Mühendisliği Sempozyumu (ELECO 2006), Bursa, Turkey, 6 - 10 December 2006,
 pp.225-229

Other Publications

- I. **DepEst: an R package of important dependency estimators for gene network inference algorithms**
 Altay G., Kurt Z., Altay N., AYDIN N.
 Other, pp.1-22, 2017

Supported Projects

- KURT Z., Other International Funding Programs, Understanding Sexual Dimorphism of Non-Alcoholic Fatty Liver Disease via Big Data Integration, 2017 - 2018
- KURT Z., Other International Funding Programs, Cross-species Comparison of Genetic Networks of Cardiometabolic Disorders, 2017 - 2018

Scientific Research / Working Group Memberships

- American Heart Association, American Heart Association (AHA), Amerika Birleşik Devletleri,
<http://www.heart.org/HEARTORG/>, 2015 - Continues
 Yang Lab, University of California, Los Angeles, Amerika Birleşik Devletleri, <https://yanglab.ibp.ucla.edu/>, 2015 - 2018

Metrics

- Publication: 42
 Citation (WoS): 192
 Citation (Scopus): 198
 H-Index (WoS): 8
 H-Index (Scopus): 8

Scholarships

Postdoctoral Fellowship for 2-years, Official Institutions of Foreign Countries, 2017 - Continues

Postdoctoral Fellowship - 1 year, Official Institutions of Foreign Countries, 2017 - Continues

Awards

KURT Z., Robocup - Simulasyon ligi, Robocup Iran open, April 2012

KURT Z., Bilgisayar Mühendisliği, Lisans Mezuniyeti İkinciliği, Yıldız Teknik Üniversitesi, September 2005