

## Prof. MEHMET VOLKAN ATALAY

### Personal Information

**Office Phone:** [+90 312 210 5576](tel:+903122105576)

**Fax Phone:** [+90 312 210 5544](tel:+903122105544)

**Email:** [vatalay@metu.edu.tr](mailto:vatalay@metu.edu.tr)

**Web:** <https://avesis.metu.edu.tr/vatalay>

### International Researcher IDs

ScholarID: Dk-ZeFkAAAAJ

ORCID: 0000-0001-7850-0601

Publons / Web Of Science ResearcherID: M-2256-2016

ScopusID: 6602757969

Yoksis Researcher ID: 48646

### Education Information

Doctorate, Universite Paris 5, Ufr Mathematique Et Informatique, France 1990 - 1993

Postgraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1988 - 1990

Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1983 - 1987

### Foreign Languages

English, C2 Mastery

French, C1 Advanced

### Dissertations

Doctorate, Reseaux de Neurones Aleatoires et Textures, Universite Paris 5, Ufr Mathematique Et Informatique, 1993

Postgraduate, Image Processing of Ottoman Documents, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1990

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2005 - Continues

Associate Professor, Virginia Polytechnic Institute and State University, Virginia Bioinformatics Institute, 2004 - 2005

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1998 - 2005

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1993 - 1998

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1993 - 1993

## Academic and Administrative Experience

Middle East Technical University, Presidency Office, 2010 - 2016

Middle East Technical University, Presidency Office, 2008 - 2010

Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2007 - 2008

Orta Doğu Teknik Üniversitesi, Faculty of Engineering, Department of Computer Engineering, 2001 - 2004

Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1996 - 1997

## Advising Theses

ATALAY M. V., Distance matrices as protein representations, Postgraduate, M.DİNÇ(Student), 2022

ATALAY M. V., Implementation of crossbar web service for interactive visualizations of biological networks, Postgraduate, A.Atakan(Student), 2020

Atalay M. V., Multi-view subcellular localization prediction of human proteins, Postgraduate, G.ÖZSARI(Student), 2019

Atalay M. V., Enzyme prediction with word embedding approach, Postgraduate, E.AKIN(Student), 2019

Atalay M. V., A customized force-directed layout algorithm with genetic algorithm techniques for biological graphs whose vertices have enzyme commission attributes, Postgraduate, F.AKSOYDAN(Student), 2019

ATALAY M. V., Deep learning for prediction of drug-target interaction space and protein functions, Doctorate, A.Süreyya(Student), 2019

ATALAY M. V., ATALAY R., Prediction of enzymatic properties of protein sequences based on the enzyme commission nomenclature, Postgraduate, A.DALKIRAN(Student), 2017

ATALAY M. V., A customized force-directed layout algorithm for biological graphs whose vertices have enzyme commission attributes, Postgraduate, H.FEHMİ(Student), 2015

ATALAY M. V., ATALAY R., An extension to GOPred to annotate Swiss-Prot and TrEMBL sequences for all gene ontology categories and EC numbers, Postgraduate, A.SÜREYYA(Student), 2015

ATALAY M. V., Mining microarray data for biologically important gene sets, Doctorate, G.KIRÇIÇEĞİ(Student), 2012

ATALAY M. V., Network structure based pathway enrichment system to analyze pathway activities, Doctorate, Z.İŞİK(Student), 2011

ATALAY M. V., Automatic reconstruction of photorealistic 3-D building models from satellite and ground-level images, Doctorate, E.SÜMER(Student), 2011

ATALAY M. V., Vision-based hand interface systems in human computer interaction, Doctorate, S.GENÇ(Student), 2010

Atalay M. V., Vision based Hand Interface Systems in Human Computer Interaction, Doctorate, S.Genç(Student), 2010

ATALAY M. V., Automated biological data acquisition and integration using machine learning techniques, Doctorate, L.ÇARKACIOĞLU(Student), 2009

ATALAY M. V., Prediction of enzyme classes in a hierarchical approach by using SPMAP, Postgraduate, A.GÜL(Student), 2009

ATALAY M. V., Subsequence feature maps for protein function annotation, Doctorate, Ö.SİNAN(Student), 2008

ATALAY M. V., Hybrid CDN P2P architecture for multimedia streaming, Doctorate, K.ÖZTOPRAK(Student), 2008

ATALAY M. V., A programming framework to implement rule-based target detection in images, Postgraduate, Y.ŞAHİN(Student), 2008

CAN T., ATALAY M. V., A classification system for the problem of protein subcellular localization, Postgraduate, G.ALAY(Student), 2007

ATALAY M. V., Improving interactive classification of satellite image content, Postgraduate, G.TEKKAYA(Student), 2007

ATALAY M. V., A clustering method for the problem of protein subcellular localization, Postgraduate, P.BEZEK(Student), 2006

ATALAY M. V., Interactive classification of satellite image content based on query by example, Postgraduate, O.DALAY(Student), 2006

ATALAY M. V., Image-based extraction of material reflectance properties of a 3D object, Postgraduate, M.ERKUT(Student), 2003

ATALAY M. V., Prediction of protein subcellular localization using global protein sequence feature, Postgraduate,

B.BOZKURT(Student), 2003

ATALAY M. V., Texture classification and retrieval using random neural network model, Postgraduate, A.TEKE(Student), 2003

ATALAY M. V., Reconstruction of a 3D human head model from images, Doctorate, R.ZARE(Student), 2003

ATALAY M. V., Fast object tracking by fusing adaptive background models and mean-shift analysis, Postgraduate, Ö.TÜZEL(Student), 2003

ATALAY M. V., Silhouette-based 3D reconstruction by energy minimization, Postgraduate, E.MENĞİ(Student), 2003

ATALAY M. V., Prediction of protein subcellular localization based on primary sequence data, Postgraduate, M.ÖZARAR(Student), 2003

ATALAY M. V., Vision-based human-computer interaction using laser pointer, Postgraduate, İAYKUT(Student), 2003

ATALAY M. V., Shortest path analysis in dynamic transportation networks by expert systems: A case study in Ankara, Bahçelievler district by using genetic algorithms, Postgraduate, G.EKE(Student), 2003

ATALAY M. V., Prediction of protein subcellular localization based on primary sequence data, Postgraduate, M.Özarar(Student), 2003

ATALAY M. V., Towards finding optimal mixture of subspaces for data classification, Doctorate, M.ELHAFIZ(Student), 2003

ATALAY M. V., Texture discrimination and segmentation of remotely sensed imagery by using adaptive subband decomposition, Postgraduate, M.YAMAN(Student), 2003

ATALAY M. V., Comparison of photo-consistency measured used in the voxel coloring algorithm, Postgraduate, O.ÖZÜN(Student), 2002

Atalay V., Relative consistency of projective reconstructions obtained from an image pair., Postgraduate, B.Otlu(Student), 2002

ATALAY M. V., Cognitive and computational aspects of gender estimation from faces, Postgraduate, M.KORAY(Student), 2002

Atalay V., A hybrid approach for Turkish optical character recognition., Postgraduate, G.Kırçıçeği(Student), 2002

ATALAY M. V., Appearance reconstruction of three dimensional models from real images., Postgraduate, U.YILMAZ(Student), 2002

HALICI U., ATALAY M. V., 3 D reconstruction of rigid objects from multiple calibrated views, Doctorate, A.YAŞAR(Student), 2002

ATALAY M. V., A Hybrid approach for Turkish optical character recognition, Postgraduate, G.KIRÇIÇEĞİ(Student), 2002

ATALAY M. V., Contextual post processing for Turkish optical character recognition., Postgraduate, S.JULAŞ(Student), 2002

Atalay V., Comparison of photo-consistency measures used in the voxel coloring algorithm., Postgraduate, O.Özün(Student), 2002

ATALAY M. V., Relative consistency of projective reconstructions obtained from an image pair, Postgraduate, B.OTLU(Student), 2002

ATALAY M. V., Image mosaicing, Postgraduate, A.ÖZZEYBEK(Student), 2000

ATALAY M. V., Segmentation of human face, Postgraduate, S.BASKAN(Student), 2000

Atalay V., Texture extraction and reconstruction from multiple images, Postgraduate, S.Genç(Student), 1999

ATALAY M. V., Texture extraction and reconstruction from multiple images, Postgraduate, S.GENÇ(Student), 1999

ATALAY M. V., An SGML viewer for form document images, Postgraduate, E.ARSLAN(Student), 1998

ATALAY M. V., A Form document image parser, Postgraduate, E.DİNCEL(Student), 1998

ATALAY M. V., Form document identification based on hierarchical tree representation, Postgraduate, P.DUYGULU(Student), 1998

ATALAY M. V., Two matching algorithms for aerial images, Postgraduate, D.ÇULHA(Student), 1998

Atalay V., Two matching algorithms for aerial images., Postgraduate, D.Çulha(Student), 1998

ATALAY M. V., A New method for road finding in aerial images based on self organization and perceptual grouping principles, Postgraduate, A.YAŞAR(Student), 1996

ATALAY M. V., A Matching algorithm based linear features, Postgraduate, M.UĞUR(Student), 1996

Atalay V., A matching algorithm based on linear features, Postgraduate, M.Uğur(Student), 1996

## Jury Memberships

Award, TÜSEB Teşvik Ödülü, Middle East Technical University, October, 2020

Award, TÜSEB Teşvik Ödülü, Middle East Technical University, October, 2020

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Drug Repurposing Approach to Identify Candidate Drug Molecules for Hepatocellular Carcinoma**  
Baser T., Rifaioglu A. S., ATALAY M. V., Atalay R. C.  
International Journal of Molecular Sciences, vol.25, no.17, 2024 (SCI-Expanded)
- II. **Hybrid deep learning models with data fusion approach for electricity load forecasting**  
Özen S., YAZICI A., ATALAY M. V.  
Expert Systems, 2024 (SCI-Expanded)
- III. **Online embedding and clustering of evolving data streams**  
Zubaroglu A., Atalay M. V.  
STATISTICAL ANALYSIS AND DATA MINING, vol.16, no.1, pp.29-44, 2023 (SCI-Expanded)
- IV. **POWER CONSUMPTION FORECASTING BY HYBRID DEEP ARCHITECTURES WITH DATA FUSION**  
Özen S., ATALAY M. V.  
Computing and Informatics, vol.42, no.1, pp.126-156, 2023 (SCI-Expanded)
- V. **SLPred: a multi-view subcellular localization prediction tool for multi-location human proteins**  
ÖZSARI G., Rifaioglu A. S., ATAKAN A., DOĞAN T., Martin M. J., Atalay R. C., ATALAY M. V.  
BIOINFORMATICS, vol.38, no.17, pp.4226-4229, 2022 (SCI-Expanded)
- VI. **CROssBAR: comprehensive resource of biomedical relations with knowledge graph representations.**  
DOĞAN T., Atas H., Joshi V., ATAKAN A., Rifaioglu A. S., NALBAT E., Nightingale A., Saidi R., Volynkin V., Zellner H., et al.  
Nucleic acids research, vol.49, no.16, 2021 (SCI-Expanded)
- VII. **Crowdsourced mapping of unexplored target space of kinase inhibitors**  
Cichonska A., Ravikumar B., Allaway R. J., Wan F., Park S., Isayev O., Li S., Mason M., Lamb A., Tanoli Z., et al.  
NATURE COMMUNICATIONS, vol.12, no.1, 2021 (SCI-Expanded)
- VIII. **MDeePred: Novel multi-channel protein featurization for deep learning-based binding affinity prediction in drug discovery**  
Rifaioglu A., Atalay R. C., KAHRAMAN D. C., DOĞAN T., Martin M., ATALAY M. V.  
Bioinformatics, vol.37, no.5, pp.693-704, 2021 (SCI-Expanded)
- IX. **Data stream clustering: a review**  
Zubaroglu A., Atalay V.  
ARTIFICIAL INTELLIGENCE REVIEW, vol.54, no.2, pp.1201-1236, 2021 (SCI-Expanded)
- X. **iBioProVis: interactive visualization and analysis of compound bioactivity space**  
Dönmez A., Rifaioglu A. S., Acar A. C., Doğan T., Cetin-Atalay R., Atalay V.  
BIOINFORMATICS, vol.36, no.14, pp.4227-4230, 2020 (SCI-Expanded)
- XI. **DEEPScreen: high performance drug-target interaction prediction with convolutional neural networks using 2-D structural compound representations**  
RİFAİOĞLU A. S., NALBAT E., Atalay V., Martin M. J., Cetin-Atalay R., DOĞAN T.  
CHEMICAL SCIENCE, vol.11, no.9, pp.2531-2557, 2020 (SCI-Expanded)
- XII. **The CAFA challenge reports improved protein function prediction and new functional annotations for hundreds of genes through experimental screens**  
Zhou N., Jiang Y., Bergquist T., Lee A., Kacsoh B., Crocker A., Lewis K., Georghiou G., Nguyen H., Hamid M., et al.  
GENOME BIOLOGY, vol.20, no.1, 2019 (SCI-Expanded)
- XIII. **DEEPred: Automated Protein Function Prediction with Multi-task Feed-forward Deep Neural Networks**  
RİFAİOĞLU A. S., Dogan T., Martin M. J., Cetin-Atalay R., Atalay V.

SCIENTIFIC REPORTS, vol.9, 2019 (SCI-Expanded)

- XIV. **ECPred: a tool for the prediction of the enzymatic functions of protein sequences based on the EC nomenclature**  
Dalkıran A., Rıfaiođlu A. S., Martin M. J., Cetin-Atalay R., Atalay M. V., Dogan T.  
BMC BIOINFORMATICS, vol.19, 2018 (SCI-Expanded)
- XV. **EClerize: A customized force-directed graph drawing algorithm for biological graphs with EC attributes**  
Danaci H. F., Cetin-Atalay R., ATALAY M. V.  
JOURNAL OF BIOINFORMATICS AND COMPUTATIONAL BIOLOGY, vol.16, no.4, 2018 (SCI-Expanded)
- XVI. **Recent applications of deep learning and machine intelligence on in silico drug discovery: methods, tools and databases.**  
Rıfaioglu A. S., Atas H., Martin M., Cetin-Atalay R., Atalay V., Dogan T.  
Briefings in bioinformatics, 2018 (SCI-Expanded)
- XVII. **Large-scale automated function prediction of protein sequences and an experimental case study validation on PTEN transcript variants**  
RıFAIOđLU A. S., Dogan T., Sarac O. S., ERSAHİN T., Saidi R., ATALAY M. V., MARTİN M. J., Cetin-Atalay R.  
PROTEINS-STRUCTURE FUNCTION AND BIOINFORMATICS, vol.86, no.2, pp.135-151, 2018 (SCI-Expanded)
- XVIII. **HandVR: a hand-gesture-based interface to a video retrieval system**  
Genc S., Bastan M., GÜDÜKBAY U., Atalay V., GÜDÜKBAY U.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.9, no.7, pp.1717-1726, 2015 (SCI-Expanded)
- XIX. **Identification of Novel Reference Genes Based on MeSH Categories**  
Ersahin T., ÇARKACIOđLU L., CAN T., Konu O., Atalay V., Cetin-Atalay R.  
PLOS ONE, vol.9, no.3, 2014 (SCI-Expanded)
- XX. **A signal transduction score flow algorithm for cyclic cellular pathway analysis, which combines transcriptome and CHIP-seq data**  
Isik Z., Ersahin T., Atalay V., AYKANAT C., Cetin-Atalay R.  
MOLECULAR BIOSYSTEMS, vol.8, no.12, pp.3224-3231, 2012 (SCI-Expanded)
- XXI. **GOPred: GO Molecular Function Prediction by Combined Classifiers**  
Sarac O. S., Atalay V., Cetin-Atalay R.  
PLOS ONE, vol.5, no.8, 2010 (SCI-Expanded)
- XXII. **Prediction of enzyme classes in a hierarchical approach by using SPMaP**  
Yaman A., Atalay V., Atalay R.  
NEW BIOTECHNOLOGY, vol.27, 2010 (SCI-Expanded)
- XXIII. **Bi-k-bi clustering: mining large scale gene expression data using two-level biclustering**  
Carkacioglu L., Atalay R. C., KONU KARAKAYALI Ö., Atalay V., CAN T.  
INTERNATIONAL JOURNAL OF DATA MINING AND BIOINFORMATICS, vol.4, no.6, pp.701-721, 2010 (SCI-Expanded)
- XXIV. **Subsequence-based feature map for protein function classification**  
Sarac O. S., Guersoy-Yuezueguellue O., Cetin-Atalay R., Atalay V.  
COMPUTATIONAL BIOLOGY AND CHEMISTRY, vol.32, no.2, pp.122-130, 2008 (SCI-Expanded)
- XXV. **Experimental study on the sensitivity of autocalibration to projective camera model parameters**  
Hassanpour R., Atalay V.  
OPTICAL ENGINEERING, vol.45, no.4, 2006 (SCI-Expanded)
- XXVI. **Implicit motif distribution based hybrid computational kernel for sequence classification**  
Atalay V., Cetin-Atalay R.  
BIOINFORMATICS, vol.21, no.8, pp.1429-1436, 2005 (SCI-Expanded)
- XXVII. **Camera auto-calibration using a sequence of 2D images with small rotations**  
Hassanpour R., Atalay V.  
PATTERN RECOGNITION LETTERS, vol.25, no.9, pp.989-997, 2004 (SCI-Expanded)
- XXVIII. **Almost autonomous training of mixtures of principal component analyzers**  
Musa M., de Ridder D., Duin R., Atalay V.

- PATTERN RECOGNITION LETTERS, vol.25, no.9, pp.1085-1095, 2004 (SCI-Expanded)
- XXIX. **Vision-based continuous Graffiti (TM)-like text entry system**  
Erdem I., Erdem M., Atalay V., Cetin A.  
OPTICAL ENGINEERING, vol.43, no.3, pp.553-558, 2004 (SCI-Expanded)
- XXX. **A hierarchical representation of form documents for identification and retrieval**  
Duygulu P., Atalay V.  
International Journal on Document Analysis and Recognition, vol.5, no.1, pp.17-27, 2003 (SCI-Expanded)
- XXXI. **Silhouette-based 3-D model reconstruction from multiple images**  
Mulayim A., Yilmaz U., Atalay V.  
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, vol.33, no.4, pp.582-591, 2003 (SCI-Expanded)
- XXXII. **Ore-age: a hybrid system for assisting and teaching mining method selection**  
Guray C., Celebi N., Atalay V., Pasamehmetoglu A.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.24, no.3, pp.261-271, 2003 (SCI-Expanded)
- XXXIII. **Prediction of protein subcellular localization based on primary sequence data**  
Ozarar M., Atalay V., Atalay R.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.611-618, 2003 (SCI-Expanded)
- XXXIV. **Texture segmentation using the mixtures of principal component analyzers**  
Musa M., Duin R., de Ridder D., Atalay V.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.505-512, 2003 (SCI-Expanded)
- XXXV. **Projection based method for segmentation of human face and its evaluation**  
Baskan S., Bulut M., Atalay V.  
PATTERN RECOGNITION LETTERS, vol.23, no.14, pp.1623-1629, 2002 (SCI-Expanded)
- XXXVI. **Vision-based single-stroke character recognition for wearable computing**  
Ozer O., Ozun O., Tuzel C., Atalay V., Cetin A.  
IEEE INTELLIGENT SYSTEMS & THEIR APPLICATIONS, vol.16, no.3, pp.33-37, 2001 (SCI-Expanded)
- XXXVII. **Matching algorithm based on Godel coding scheme**  
Dicle N., Atalay V.  
Proceedings of SPIE - The International Society for Optical Engineering, vol.3974, pp.576-583, 2000 (SCI-Expanded)
- XXXVIII. **Subband domain coding of binary textual images for document archiving**  
Gerek O., Cetin A., Tewfik A., Atalay V.  
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.8, no.10, pp.1438-1446, 1999 (SCI-Expanded)
- XXXIX. **Repulsive attractive network for baseline extraction on document images**  
Oztop E., Mulayim A., Atalay V., Yarman-Vural F.  
SIGNAL PROCESSING, vol.75, no.1, pp.1-10, 1999 (SCI-Expanded)
- XL. **A matching algorithm based on linear features**  
Atalay V., Yilmaz M.  
PATTERN RECOGNITION LETTERS, vol.19, no.9, pp.857-867, 1998 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Data Centric Molecular Analysis and Evaluation of Hepatocellular Carcinoma Therapeutics Using Machine Intelligence-Based Tools**  
Cetin-Atalay R., Kahraman D. C., Nalbat E., Rifaioğlu A. S., Atakan A., Dönmez A., Atas H., Atalay M. V., Acar A. C., Doğan T.  
JOURNAL OF GASTROINTESTINAL CANCER, vol.52, no.4, pp.1266-1276, 2021 (ESCI)
- II. **Multi-task Deep Neural Networks in Protein Function Prediction**  
RİFAİOĞLU A. S., doğan t., Martin M. J., ATALAY R., ATALAY M. V.  
arXiv, 2017 (Non Peer-Reviewed Journal)

### III. **An Image-Based Inexpensive 3D Scanner**

Yilmaz U., Mülayim A. Y., Atalay V.

International Journal of Image and Graphics, vol.3, no.2, pp.235-263, 2003 (ESCI)

### IV. **Computer vision based mouse**

Erdem A., Erdem E., Yardimci Y., Atalay V., Cetin A. E.

ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings, vol.4, pp.4178, 2002 (Scopus)

## **Books & Book Chapters**

### I. **Forecasting of Product Quality Through Anomaly Detection**

Dinc M., Ertekin Bolelli Ş., Ozkan H., Meydanli C., Atalay M. V.

in: Machine Learning and Knowledge Discovery in Databases, Cellier P., Driessens K., Editor, Springer-Verlag, Basel, pp.357-366, 2020

## **Refereed Congress / Symposium Publications in Proceedings**

### I. **Novel isoxazole- piperazine derivatives inhibit the stemness of HCC cells**

NALBAT E., İBİŞ K., ÇALIŞKAN B., BANOĞLU E., ATALAY M. V., ATALAY R.

AASLD-TASL Digital Hepatology Meeting, Ankara, Turkey, 15 January 2022, pp.5-6

### II. **In vitro validation of drug-target interactions revealed in silico by Comprehensive Resource of Biomedical Relations with Network Representations and Deep Learning (CROSSBAR) in HCC**

NALBAT E., RİFAİOĞLU A. S., DOĞAN T., Martin M. J., Cetin-Atalay R., ATALAY M. V.

AACR Annual Meeting, ELECTR NETWORK, 22 - 24 June 2020, vol.80

### III. **Comparison of predictive models for forecasting timeseries data**

Özen S., Atalay V., YAZICI A.

3rd International Conference on Big Data Research, ICBDR 2019, Cergy-Pontoise, France, 20 - 21 November 2019, pp.172-176

### IV. **Online embedding and clustering of data streams**

Zubaroglu A., Atalay V.

3rd International Conference on Big Data Research, ICBDR 2019, Cergy-Pontoise, France, 20 - 21 November 2019, pp.142-146

### V. **Forecasting of Product Quality Through Anomaly Detection** Mehmet Dinç,

Dinc M., ERTEKİN BOLELLİ Ş., Ozkan H., Meydanli C., ATALAY M. V.

2nd International Conference on Digital Transformation and Smart Systems, Ankara, Turkey, 23 - 25 October 2019

### VI. **Receptor-Ligand Binding Affinity Prediction via Multi-Channel Deep Chemogenomic Modeling**

Atalay M. V., Rifaioğlu A. S., Atalay R., Doğan T., Martin M.

The International Symposium on Health Informatics and Bioinformatics (HIBIT 2019), İzmir, Turkey, 17 - 18 October 2019

### VII. **Forecasting of Product Quality Through Anomaly Detection**

Dinc M., ERTEKİN BOLELLİ Ş., Ozkan H., Meydanli C., ATALAY M. V.

ECML/PKDD 2019 Workshop on Io Stream for Data Driven Predictive Maintenance, Würzburg, Germany, 16 September 2019

### VIII. **iBioProVis: Interactive Visualization and Analysis of Compound Bioactivity Space**

Dönmez A., RİFAİOĞLU A. S., ACAR A. C., DOĞAN T., Martin M. J., ATALAY R., ATALAY M. V.

27th Conference on Intelligent Systems for Molecular Biology and 18th European Conference on Computational Biology, Basel, Switzerland, 21 - 25 July 2019

### IX. **CROSSBAR: Comprehensive Resource of Biomedical Relations with Network Representations and Deep Learning", Oral presentation**

Atalay M. V., Doğan T., Atalay R., Nalbat E., Rifaioğlu A. S., Ataş H., Martin M.

27th Conference on Intelligent Systems for Molecular Biology and 18th European Conference on Computational Biology, Basel, Switzerland, 21 - 25 July 2019

- X. **Drug-Target Interaction Prediction with Deep Convolutional Neural Networks Using Compound Images**  
RİFAİOĞLU A. S., ATALAY M. V., Martin M. J., ATALAY R., Doğan T.  
26th Conference on Intelligent Systems for Molecular Biology, Chicago, United States Of America, 6 - 10 July 2018
- XI. **Automated Negative Gene Ontology Based Functional Predictions for Proteins with UniGOPred**  
Doğan T., RİFAİOĞLU A. S., Saidi R., Martin M. J., ATALAY M. V., ATALAY R.  
26th Conference on Intelligent Systems for Molecular Biology, Chicago, United States Of America, 6 - 10 July 2018
- XII. **Investigation of Multi-task Deep Neural Networks in Automated Protein Function Prediction**  
RİFAİOĞLU A. S., Martin M. J., ATALAY R., ATALAY M. V., Doğan T.  
ISMB/ECCB 2017: 25th Annual International Conference on Intelligent Systems for Molecular Biology, Prag, Czech Republic, 21 - 25 July 2017
- XIII. **Prediction of Enzymatic Properties of Protein Sequences Based on the EC Nomenclature**  
DALKIRAN A., Doğan T., RİFAİOĞLU A. S., ATALAY M. V., Martin M. J., ATALAY R.  
ISMB/ECCB 2017: 25th Annual International Conference on Intelligent Systems for Molecular Biology, Prag, Czech Republic, 21 - 25 July 2017
- XIV. **Prediction of Enzymatic Properties of Protein Sequences Based on the EC Nomenclature**  
DALKIRAN A., RİFAİOĞLU A. S., Doğan T., ATALAY M. V., Martin M. J., ATALAY R.  
10th The International Symposium on Health Informatics and Bioinformatics (HIBIT 2017), Kalkanlı, Cyprus (Kktc), 28 - 30 June 2017, pp.37
- XV. **Investigation of Multitask Deep Neural Networks for Protein Function Prediction**  
RİFAİOĞLU A. S., Martin M. J., ATALAY R., ATALAY M. V., Doğan T.  
10th The International Symposium on Health Informatics and Bioinformatics (HIBIT 2017), Erdemli, Cyprus (Kktc), 28 - 30 June 2017
- XVI. **EClerize: A Customized Force-Directed Layout Algorithm for Biological Networks with EC Attributes**  
Danacı H. F., ATALAY R., ATALAY M. V.  
GLBIO 2017: Great Lakes Bioinformatics Conference, Şikago, United States Of America, 15 - 17 May 2017
- XVII. **UniGOPred: A Large Scale Automated GO Term Annotation System for UniProtKB**  
RİFAİOĞLU A. S., Doğan T., SARAÇ Ö. S., Saidi R., ATALAY M. V., Martin M. J., ATALAY R.  
GLBIO 2017: Great Lakes Bioinformatics Conference, Şikago, United States Of America, 15 - 17 May 2017
- XVIII. **ECPred: An Automated Enzymatic Function Prediction Tool Based on Combination of Different Classifiers**  
DALKIRAN A., RİFAİOĞLU A. S., Doğan T., ATALAY M. V., Martin M. J., ATALAY R.  
GLBIO 2017: Great Lakes Bioinformatics Conference, May 15-17, Şikago, United States Of America, 15 - 17 May 2017
- XIX. **UniGOPred and ECPred Automated Function Prediction Tools Based on A Combination of Different Classifiers**  
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## Supported Projects

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ATALAY M. V., HAMANAKA R., Project Supported by Higher Education Institutions, Drug Discovery for SerineGlycine OneCarbon Pathway Enzymes SHMT2 and MTHFD2 by Deep Learning and Machine Learning, 2022 - 2022

Atalay M. V., TÜBİTAK International Bilateral Joint Cooperation Program Project, Comprehensive Resource of Biomedical Relations with Deep Learning and Network Representations, 2017 - 2020

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## Scientific Refereeing

14th Symposium on Health Informatics and Bioinformatics, Conference Paper (Abstract), September 2021

IEEE/ACM TRANSACTIONS ON COMPUTATIONAL BIOLOGY AND BIOINFORMATICS, SCI Journal, May 2021

PLOS ONE, SCI Journal, November 2020

TUBİTAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Middle East Technical University, Turkey, November 2020

BMC BIOINFORMATICS, SCI Journal, October 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, Middle East Technical University, Turkey, October 2020

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## **Metrics**

Publication: 112

Citation (WoS): 1030

Citation (Scopus): 1402

H-Index (WoS): 15

H-Index (Scopus): 18

## **Non Academic Experience**

ODTÜ TEKNOKENT Yönetim AŞ

Türkiye Bilişim Derneği

ASELSAN