

# **Prof. NAZLI İKİZLER CİNİŞ**

## **Personal Information**

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## **International Researcher IDs**

ORCID: 0000-0002-8644-2875

Publons / Web Of Science ResearcherID: E-8961-2013

Yoksis Researcher ID: 178080

## **Education Information**

Doctorate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 2002 - 2008

Postgraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 2000 - 2002

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 1996 - 2000

## **Foreign Languages**

English, C1 Advanced

## **Dissertations**

Doctorate, Understanding human motion: Recognition and retrieval of human activities, Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Yıl) (Tezli), 2008

Postgraduate, Benefit maximizing classification using feature intervals, Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Yıl) (Tezli), 2002

## **Research Areas**

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Engineering and Technology

## **Academic Titles / Tasks**

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2011 - 2018

Lecturer PhD, Boston University, Mühendislik Fakültesi, Bilgisayar Müh., 2008 - 2010

Research Assistant, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Computer Engineering, 2000 - 2008

## **Academic and Administrative Experience**

Hacettepe Üniversitesi, Bilişim Enstitüsü, Bilişim Sistemleri Anabilim Dalı, 2012 - Continues

## **Advising Theses**

İKİZLER CİNİŞ N., DUYGULU ŞAHİN P., Utilizing multiple instance learning for computer vision tasks, Postgraduate, F.ŞENER(Student), 2013

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

- I. **Cross-lingual few-shot sign language recognition**  
Bilge Y. C., İKİZLER CİNİŞ N., CİNİŞ R. G.  
Pattern Recognition, vol.151, 2024 (SCI-Expanded)
- II. **Leveraging cross-resolution attention for effective extreme low-resolution video action recognition**  
Oguz O., İKİZLER CİNİŞ N.  
Signal, Image and Video Processing, vol.18, no.1, pp.399-406, 2024 (SCI-Expanded)
- III. **Towards Zero-shot Sign Language Recognition**  
Bilge Y. C., CİNİŞ R. G., İKİZLER CİNİŞ N.  
IEEE Transactions on Pattern Analysis and Machine Intelligence, vol.45, no.1, pp.1217-1232, 2023 (SCI-Expanded)
- IV. **Comparison of 2D and 3D attention mechanisms for human (collective) activity recognition**  
ZALLUHOĞLU C., İKİZLER CİNİŞ N.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.16, no.4, pp.865-872, 2022 (SCI-Expanded)
- V. **Top-down and bottom-up attentional multiple instance learning for still image action recognition**  
BAŞ Ç., İKİZLER CİNİŞ N.  
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.104, 2022 (SCI-Expanded)
- VI. **Merging Super Resolution and Attribute Learning for Low-Resolution Person Attribute Recognition**  
Abbaszadi R., İKİZLER CİNİŞ N.  
IEEE ACCESS, vol.10, pp.30436-30444, 2022 (SCI-Expanded)
- VII. **Multi-stream pose convolutional neural networks for human interaction recognition in images**  
TANISIK G., ZALLUHOĞLU C., İKİZLER CİNİŞ N.  
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.95, 2021 (SCI-Expanded)
- VIII. **Leveraging auxiliary image descriptions for dense video captioning**  
Boran E., Erdem A., İKİZLER CİNİŞ N., Erdem E., Madhyastha P., Specia L.  
PATTERN RECOGNITION LETTERS, vol.146, pp.70-76, 2021 (SCI-Expanded)
- IX. **Using independently recurrent networks for reinforcement learning based unsupervised video summarization**  
Yaliniz G., İKİZLER CİNİŞ N.  
MULTIMEDIA TOOLS AND APPLICATIONS, vol.80, no.12, pp.17827-17847, 2021 (SCI-Expanded)
- X. **Collective Sports: A multi-task dataset for collective activity recognition**  
ZALLUHOĞLU C., İKİZLER CİNİŞ N.  
IMAGE AND VISION COMPUTING, vol.94, 2020 (SCI-Expanded)
- XI. **Region based multi-stream convolutional neural networks for collective activity recognition**  
ZALLUHOĞLU C., Ikizler-Cinbis N.  
Journal of Visual Communication and Image Representation, vol.60, pp.170-179, 2019 (SCI-Expanded)
- XII. **Histograms of sequences: a novel representation for human interaction recognition**  
CAVENT A., Ikizler-Cinbis N.  
IET COMPUTER VISION, vol.12, no.6, pp.844-854, 2018 (SCI-Expanded)
- XIII. **Space-Time Tree Ensemble for Action Recognition and Localization**

- Ma S., ZHANG J., Sclaroff S., Ikizler-Cinbis N., SIGAL L.  
 INTERNATIONAL JOURNAL OF COMPUTER VISION, vol.126, pp.314-332, 2018 (SCI-Expanded)
- XIV. **Data-driven image captioning via salient region discovery**  
 KİLICKAYA M., AKKUŞ B. K., Cakici R., Erdem A., Erdem E., Ikizler-Cinbis N.  
 IET COMPUTER VISION, vol.11, no.6, pp.398-406, 2017 (SCI-Expanded)
- XV. **Low-level features for visual attribute recognition: An evaluation**  
 DANACI E. G., Ikizler-Cinbis N.  
 PATTERN RECOGNITION LETTERS, vol.84, pp.185-191, 2016 (SCI-Expanded)
- XVI. **Facial descriptors for human interaction recognition in still images**  
 TANIŞIK G., ZALLUHOĞLU C., Ikizler-Cinbis N.  
 PATTERN RECOGNITION LETTERS, vol.73, pp.44-51, 2016 (SCI-Expanded)
- XVII. **Automatic Description Generation from Images: A Survey of Models, Datasets, and Evaluation Measures**  
 Bernardi R., Cakici R., Elliott D., Erdem A., ERDEM M. E., İKİZLER CİNİŞ N., Keller F., Muscat A., Plank B.  
 JOURNAL OF ARTIFICIAL INTELLIGENCE RESEARCH, vol.55, pp.409-442, 2016 (SCI-Expanded)
- XVIII. **Two-person interaction recognition via spatial multiple instance embedding**  
 Sener F., Ikizler-Cinbis N.  
 JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION, vol.32, pp.63-73, 2015 (SCI-Expanded)
- XIX. **The Effect Of Thrower's Ten Exercise Program On The Kinematics of Flick Pattern and Flick Distance In Elite Underwater Hockey**  
 TOK D., BAŞ Ç., İKİZLER CİNİŞ N., BAYRAKCI TUNAY V.  
 MEDICINE AND SCIENCE IN SPORTS AND EXERCISE, vol.47, no.5, pp.962, 2015 (SCI-Expanded)
- XX. **Ensemble of multiple instance classifiers for image re-ranking**  
 Sener F., Ikizler-Cinbis N.  
 IMAGE AND VISION COMPUTING, vol.32, no.5, pp.348-362, 2014 (SCI-Expanded)
- XXI. **Web-Based Classifiers for Human Action Recognition**  
 Ikizler-Cinbis N., Sclaroff S.  
 IEEE TRANSACTIONS ON MULTIMEDIA, vol.14, no.4, pp.1031-1045, 2012 (SCI-Expanded)
- XXII. **Histogram of oriented rectangles: A new pose descriptor for human action recognition**  
 Ikizler N., Duygulu P.  
 IMAGE AND VISION COMPUTING, vol.27, no.10, pp.1515-1526, 2009 (SCI-Expanded)
- XXIII. **Searching for complex human activities with no visual examples**  
 Ikizler N., Forsyth D. A.  
 INTERNATIONAL JOURNAL OF COMPUTER VISION, vol.80, no.3, pp.337-357, 2008 (SCI-Expanded)
- XXIV. **Diagnosis of gastric carcinoma by classification on feature projections**  
 GÜVENİR H. A., EMEKSİZ N., Ikizler N., ÖRMECİ N.  
 ARTIFICIAL INTELLIGENCE IN MEDICINE, vol.31, no.3, pp.231-240, 2004 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **MaskSplit: Self-supervised Meta-learning for Few-shot Semantic Segmentation**  
 Amac M. S., Sencan A., BARAN O. B., İKİZLER CİNİŞ N., CİNİŞ R. G.  
 22nd IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), Hawaii, United States Of America,  
 4 - 08 January 2022, pp.428-438
- II. **Multi-Contrast MRI Segmentation Trained on Synthetic Images**  
 Irmakci I., Unel Z. E., İKİZLER CİNİŞ N., Bagci U.  
 44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2022,  
 Glasgow, England, 11 - 15 July 2022, vol.2022-July, pp.5030-5034
- III. **Red Carpet to Fight Club: Partially-supervised Domain Transfer for Face Recognition in Violent Videos**

- Bilge Y. C., Yucel M. K., CİNBIŞ R. G., İKİZLER CİNBIŞ N., DUYGULU ŞAHİN P.  
IEEE Winter Conference on Applications of Computer Vision (WACV), ELECTR NETWORK, 5 - 09 January 2021,  
pp.3357-3368
- IV. **Image Captioning with Unseen Objects**  
Berkan D., CİNBIŞ R. G., İKİZLER CİNBIŞ N.  
British Machine Vision Conference, 9 - 12 September 2019
- V. **Zero-Shot Sign Language Recognition: Can Textual Data Uncover Sign Languages?**  
Bilge Y. C., İKİZLER CİNBIŞ N., CİNBIŞ R. G.  
British Machine Vision Conference, 9 - 12 September 2019
- VI. **Mask Guided Fusion for Group Activity Recognition in Images**  
Akar A., İKİZLER CİNBIŞ N.  
20th International Conference on Image Analysis and Processing (ICIAP), Trento, Italy, 9 - 13 September 2019,  
vol.11752, pp.282-291
- VII. **Unsupervised Video Summarization with Independently Recurrent Neural Networks**  
Yalınız G., İKİZLER CİNBIŞ N.  
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- VIII. **LEARNING VISUALLY CONSISTENT LABEL EMBEDDINGS FOR ZERO-SHOT LEARNING**  
Demirel B., CİNBIŞ R. G., İKİZLER CİNBIŞ N.  
26th IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, 22 - 25 September 2019, pp.3656-  
3660
- IX. **RecipeQA: A Challenge Dataset for Multimodal Comprehension of Cooking Recipes**  
Yagcioglu S., ERDEM İ. A., ERDEM M. E., İKİZLER CİNBIŞ N.  
Conference on Empirical Methods in Natural Language Processing (EMNLP) 2018, Bruksel, Belgium, 31 October  
2018, pp.1358-1368
- X. **Görsel Verilerde İnsan Hareket ve Etkileşimlerinin Analizi**  
İKİZLER CİNBIŞ N.  
Akıllı Sistemlerde Yenilikler ve Uygulamalar Konferansı, Adana, Turkey, 4 - 06 October 2018
- XI. **Zero-Shot Object Detection by Hybrid Region Embedding**  
Berkan D., CİNBIŞ R. G., İKİZLER CİNBIŞ N.  
British Machine Vision Conference, 3 - 07 September 2018
- XII. **Classification of human poses and orientations with deep learning**  
ATVAR A., İKİZLER CİNBIŞ N.  
2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIII. **Attributes2Classname: A discriminative model for attribute-based unsupervised zero-shot learning**  
Demirel B., CİNBIŞ R. G., İKİZLER CİNBIŞ N.  
International Conference on Computer Vision, 22 - 27 October 2017
- XIV. **Automatic Description Generation from Images: A Survey of Models, Datasets, and Evaluation Measures**  
BERNARDI R., ÇAKICI R., ELLIOTT D., ERDEM İ. A., ERDEM M. E., İKİZLER CİNBIŞ N., KELLER F., MUSCAT A., PLANK B.  
International Joint Conference on Artificial Intelligence, 19 - 25 August 2017
- XV. **Using deep multiple instance learning for action recognition in still images**  
BAŞ Ç., ZALLUHOĞLU C., İKİZLER CİNBIŞ N.  
2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, Turkey, 15 - 18  
May 2017
- XVI. **Anomaly detection using improved background subtraction**  
Bilge Y. C., KAYA F., İKİZLER CİNBIŞ N., ÇELİKCAN U., SEVER H.  
2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, Turkey, 15 - 18  
May 2017
- XVII. **Re-evaluating Automatic Metrics for Image Captioning**  
KİLİCKAYA M., ERDEM İ. A., ERDEM M. E., İKİZLER CİNBIŞ N.

- The 15th Conference of the European Chapter of the Association for Computational Linguistics, 3 - 07 April 2017
- XVIII. **Leveraging Captions in the Wild to Improve Object Detection**  
KİLICKAYA M., İKİZLER CİNBIŞ N., ERDEM M. E., ERDEM İ. A.  
5th Workshop on Vision and Language (VL'16), 12 August 2016
- XIX. **Counting People in Crowded Scenes via Detection and Regression Fusion**  
ZALLUHOĞLU C., İKİZLER CİNBIŞ N.  
ICIAR, 13 - 15 July 2016
- XX. **TasvirEt: A Benchmark Dataset for Automatic Turkish Description Generation from Images**  
Unal M. E., Citamak B., Yagcioglu S., Erdem A., ERDEM M. E., İKİZLER CİNBIŞ N., Cakici R.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016,  
pp.1977-1980
- XXI. **Visual Saliency Estimation via Attribute Based Classifiers and Conditional Random Field**  
Demirel B., CİNBIŞ R. G., İKİZLER CİNBIŞ N.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016,  
pp.861-864
- XXII. **A comparison of low level features for visual attribute recognition**  
DANACI E. G., İKİZLER CİNBIŞ N.  
2015 23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, Turkey, 16 - 19  
May 2015
- XXIII. **A multiple region selection based approach for scene recognition**  
EKİZ E., İKİZLER CİNBIŞ N.  
2015 23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, Turkey, 16 - 19  
May 2015
- XXIV. **The effects of thrower's ten exercise program on the kinematics of flick pattern and flick distance in  
elite underwater hockey**  
TOK D., BAŞ Ç., İKİZLER CİNBIŞ N., BAYRAKCI TUNAY V.  
ACSM 62. Annual Meeting, 26 - 30 May 2015, vol.47, pp.961-970
- XXV. **Data driven image captioning with meta class based retrieval**  
KİLICKAYA M., ERDEM M. E., ERDEM İ. A., İKİZLER CİNBIŞ N., ÇAKICI R.  
2014 22nd Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, Turkey, 23 -  
25 April 2014
- XXVI. **Recognizing human actions from noisy videos via multiple instance learning**  
ŞENER F., SAMET N., DUYGULU ŞAHİN P., İKİZLER CİNBIŞ N.  
2013 21st Signal Processing and Communications Applications Conference (SIU), Haspolat, Turkey, 24 - 26 April  
2013
- XXVII. **Comparison of clustering methods for pose based video summarization**  
BAŞ Ç., İKİZLER CİNBIŞ N.  
2013 21st Signal Processing and Communications Applications Conference (SIU), Haspolat, Turkey, 24 - 26 April  
2013
- XXVIII. **Recognizing Human Actions in Images Using Segment and Contour Features**  
Tanisik G., GÜÇLÜ O., İKİZLER CİNBIŞ N.  
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XXIX. **Action Recognition and Localization by Hierarchical Space-Time Segments**  
Ma S., Zhang J., Ikizler-Cinbis N., Sclaroff S.  
IEEE International Conference on Computer Vision (ICCV), Sydney, Australia, 1 - 08 December 2013, pp.2744-  
2751
- XXX. **Multiple instance learning for re ranking of web image search results**  
ŞENER F., İKİZLER CİNBIŞ N., DUYGULU ŞAHİN P.  
2012 20th Signal Processing and Communications Applications Conference (SIU), Mugla, Turkey, Turkey, 18 - 20  
April 2012
- XXXI. **Recognition of complex human activities by using sequential pyramid matching**

- CAVENT A., İKİZLER CİNBIŞ N.  
2012 20th Signal Processing and Communications Applications Conference (SIU), Mugla, Turkey, Turkey, 18 - 20 April 2012
- XXXII. **On Recognizing Actions in Still Images via Multiple Features**  
Sener F., Bas C., Ikizler-Cinbis N.  
12th European Conference on Computer Vision (ECCV), Florence, Italy, 7 - 13 October 2012, vol.7585, pp.263-272
- XXXIII. **Unsupervised Learning of Discriminative Relative Visual Attributes**  
Ma S., Sclaroff S., Ikizler-Cinbis N.  
12th European Conference on Computer Vision (ECCV), Florence, Italy, 7 - 13 October 2012, vol.7585, pp.61-70
- XXXIV. **Object recognition and localization via spatial instance embedding**  
Ikizler-Cinbis N., SCLAROFF S.  
2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.452-455
- XXXV. **Object, Scene and Actions: Combining Multiple Features for Human Action Recognition**  
Ikizler-Cinbis N., Sclaroff S.  
11th European Conference on Computer Vision, Heraklion, Greece, 5 - 11 September 2010, vol.6311, pp.494-507
- XXXVI. **Learning Actions From the Web**  
Ikizler-Cinbis N., Cinbis R. G., Sclaroff S.  
12th IEEE International Conference on Computer Vision, Kyoto, Japan, 29 September - 02 October 2009, pp.995-1002
- XXXVII. **Human action recognition with line and flow histograms**  
İKİZLER N., CİNİŞ R. G., DUYGULU ŞAHİN P.  
2008 19th International Conference on Pattern Recognition, Tampa, FL, USA, 8 - 11 December 2008
- XXXVIII. **Recognizing actions from still images**  
İKİZLER N., CİNİŞ R. G., DUYGULU ŞAHİN P.  
2008 19th International Conference on Pattern Recognition, Tampa, FL, USA, 8 - 11 December 2008
- XXXIX. **Re ranking of image search results using a graph algorithm**  
SEVİL S., ZİTOUNİ H., ÖZKAN D., İKİZLER N., DUYGULU ŞAHİN P.  
2008 IEEE 16th Signal Processing, Communication and Applications Conference, Aydin, Turkey, 20 - 22 April 2008
- XL. **Human action recognition using distribution of oriented rectangular patches**  
İKİZLER N., DUYGULU ŞAHİN P.  
Human Motion - Understanding, Modeling, Capture and Animation, Proceedings, Rio-De-Janeiro, Brazil, 14 September - 20 October 2007, vol.4814, pp.271-284
- XLI. **Searching video for complex activities with finite state models**  
Ikizler N., FORSYTH D.  
2007 IEEE Computer Society Conference on Computer Vision and Pattern Recognition, CVPR'07, Minneapolis, MN, United States Of America, 17 - 22 June 2007
- XLII. **Person search made easy**  
İKİZLER N., DUYGULU ŞAHİN P.  
Proceedings of the 4th international conference on Image and Video Retrieval, Singapore, Singapore, 20 - 22 July 2005
- XLIII. **Improvement of face detection algorithms for news videos**  
İKİZLER N., DUYGULU ŞAHİN P.  
Proceedings of the IEEE 13th Signal Processing and Communications Applications Conference, 2005., Kayseri, Turkey, Turkey, 16 - 18 May 2005
- XLIV. **Maximizing Benefit of Classifications Using Feature Intervals**  
İKİZLER N., GÜVENİR H. A.  
Knowledge-Based Intelligent Information and Engineering Systems, Oxford, United Kingdom, 1 - 03 September 2003
- XLV. **Feature Dependency in Benefit Maximization A Case Study in the Evaluation of Bank Loan Applications**

İKİZLER N., GÜVENİR H. A.

Twelfth Turkish Symposium on Artificial Intelligence and Neural Networks, Turkey, 2 - 04 July 2003

**XLVI. Mining Interesting Rules in Bank Loans Data**

İKİZLER N., GÜVENİR H. A.

Tenth Turkish Symposium on Artificial Intelligence and Neural Networks, Turkey, 21 - 22 June 2001

## **Supported Projects**

İKİZLER CİNBIŞ N., Project Supported by Higher Education Institutions, ICCV 2017 konferansına katılım, 2017 - 2020

İKİZLER CİNBIŞ N., DUYGULU ŞAHİN P., ERDEM İ. A., ERDEM M. E., Project Supported by Higher Education Institutions, Bozkırda Yapay Öğrenme Yaz Okulu 2017 Bilgisayarlı Görü ve Robotik, 2017 - 2018

## **Activities in Scientific Journals**

IET Computer Vision, Assistant Editor/Section Editor, 2016 - Continues

## **Metrics**

Publication: 70

Citation (WoS): 516

Citation (Scopus): 830

H-Index (WoS): 11

H-Index (Scopus): 14

## **Non Academic Experience**

Mantis Yazılım ve Danışmanlık A.Ş.

ASELSAN