

Asst. Prof. RAMAZAN GÖKBERK CİNBIŞ

Personal Information

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Biography

I was a doctoral researcher in the [LEAR \(now THOTH\) team](#), at INRIA Grenoble, France, from 2010 until 2014, where my advisors were [Jakob Verbeek](#) and [Cordelia Schmid](#), and received a PhD degree from Université de Grenoble. I received an M.A. degree from Boston University, USA, in 2010, where my advisor was [Stan Sclaroff](#). My research interests include machine learning and computer vision, with special interest in data-efficient deep learning via minimal supervision (zero-shot, few-shot, weakly-supervised, self-supervised learning), learning to learn (meta learning), vision and language integration, and large-scale image/video understanding.

Education Information

Doctorate, Université De Grenoble, Bilgisayar Bilimleri, France 2010 - 2014

Postgraduate, Boston University, Computer Science, United States Of America 2008 - 2010

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2004 - 2008

Dissertations

Doctorate, Fisher Kernel Based Models for Image Classification and Object Localization, Université De Grenoble, Bilgisayar Bilimleri, 2014

Postgraduate, Set Based Modeling Of Objects And Their Context, Boston University, Computer Science, 2010

Research Areas

Computer Sciences

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Computer Engineering, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Computer Engineering, 2017 - 2018

Assistant Professor, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Computer Engineering, 2016 - 2017

Advising Theses

Cinbiş R. G. , Closed-form sample probing for training generative models in zero-shot learning, Postgraduate, S.ÇETİN(Student), 2022

Cinbiş R. G. , Prior knowledge guided weakly supervised object detection and semantic segmentation, Postgraduate, F.BALTACI(Student), 2022

Cinbiş R. G. , Semi-supervised generative guidance for zero-shot semantic segmentation, Postgraduate, A.CEM(Student), 2022

Cinbiş R. G. , Attention mechanisms for semantic few-shot learning, Postgraduate, O.BUĞRA(Student), 2021

Cinbiş R. G. , Scene-preserving person appearance transfer, Postgraduate, F.ÖZGE(Student), 2021

Cinbiş R. G. , Generalized zero-shot object recognition without class-attribute relations, Postgraduate, M.ERSEL(Student), 2021

Cinbiş R. G. , Weakly supervised approaches for image classification in remote sensing and medical image analysis, Postgraduate, B.AYGÜNEŞ(Student), 2020

Cinbiş R. G. , Style synthesizing conditional generative adversarial networks, Postgraduate, Y.DENİZ(Student), 2020

Cinbiş R. G. , Aksoy S., Learning efficient visual embedding models under data constraints, Postgraduate, M.BÜLENT(Student), 2019

Cinbiş R. G. , Aksoy S., Image super-resolution using deep feedforward neural networks in spectral domain, Postgraduate, O.AYDIN(Student), 2018

Cinbiş R. G. , Aksoy S., Fine-grained object recognition in remote sensing imagery, Postgraduate, G.SÜMBÜL(Student), 2018

Cinbiş R. G. , İkizler Cinbiş N., Attribute based classifiers for image understanding, Postgraduate, B.DEMİREL(Student), 2016

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Caption Generation on Scenes with Seen and Unseen Object Categories**
Demirel B., Cinbiş R. G.
IMAGE AND VISION COMPUTING, vol.0, 2022 (Journal Indexed in SCI Expanded)
- II. **How robust are discriminatively trained zero-shot learning models?**
Yucel M. K. , Cinbis R. G. , DUYGULU ŞAHİN P.
IMAGE AND VISION COMPUTING, vol.119, 2022 (Journal Indexed in SCI)
- III. **Towards Zero-shot Sign Language Recognition**
Bilge Y. C. , CİNBIŞ R. G. , İkizler-Cinbis N.
IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022 (Journal Indexed in SCI Expanded)
- IV. **DeepSide: A Deep Learning Approach for Drug Side Effect Prediction**
Uner O. C. , Kuru H. I. , CİNBIŞ R. G. , Tastan O., Cicek E.
IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2022 (Journal Indexed in SCI Expanded)
- V. **Weakly supervised instance attention for multisource fine-grained object recognition with an application to tree species classification**
Aygunes B., CİNBIŞ R. G. , Aksoy S.
ISPRS Journal of Photogrammetry and Remote Sensing, vol.176, pp.262-274, 2021 (Journal Indexed in SCI)
- VI. **Key protected classification for collaborative learning**
Sariyildiz M. B. , Cinbi R. G. , Ayday E.
Pattern Recognition, vol.104, 2020 (Journal Indexed in SCI Expanded)
- VII. **Multisource Region Attention Network for Fine-Grained Object Recognition in Remote Sensing Imagery**
Sumbul G., Cinbiş R. G. , Aksoy S.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.57, pp.4929-4937, 2019 (Journal Indexed in SCI)
- VIII. **Fine-Grained Object Recognition and Zero-Shot Learning in Remote Sensing Imagery**
Sumbul G., Cinbis R. G. , Aksoy S.

IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.56, no.2, pp.770-779, 2018 (Journal Indexed in SCI)

IX. Weakly Supervised Object Localization with Multi-Fold Multiple Instance Learning

CİNBIŞ R. G. , Verbeek J., Schmid C.

IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, vol.39, no.1, pp.189-203, 2017
(Journal Indexed in SCI)

X. Approximate Fisher Kernels of Non-iid Image Models for Image Categorization

CİNBIŞ R. G. , Verbeek J., Schmid C.

IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, vol.38, no.6, pp.1084-1098, 2016
(Journal Indexed in SCI)

XI. Image Mining Using Directional Spatial Constraints

AKSOY S., CİNBIŞ R. G.

IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.7, no.1, pp.33-37, 2010 (Journal Indexed in SCI)

Articles Published in Other Journals

I. Single-Image Super-Resolution Analysis in DCT Spectral Domain

Aydın O., Cinbiş R. G.

BALKAN JOURNAL OF ELECTRICAL & COMPUTER ENGINEERING, vol.8, no.3, pp.209-217, 2020 (Other Refereed National Journals)

Books & Book Chapters

I. Derin Öğrenme

Yarman Vural F. T. , Cinbiş R. G. , Kalkan S.

Buzdağı Yayınevi, Ankara, 2018

Refereed Congress / Symposium Publications in Proceedings

I. CLOSED-FORM SAMPLE PROBING FOR LEARNING GENERATIVE MODELS IN ZERO-SHOT LEARNING

Çetin S., Baran O. B. , Cinbiş R. G.

International Conference on Learning Representations, 25 - 29 April 2022

II. MaskSplit: Self-supervised Meta-learning for Few-shot Semantic Segmentation

Amac M. S. , Sencan A., BARAN O. B. , İkizler-Cinbis N., CİNBIŞ R. G.

22nd IEEE/CVF Winter Conference on Applications of Computer Vision, WACV 2022, Hawaii, United States Of America, 4 - 08 January 2022, pp.428-438

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. A Deep Dive into Adversarial Robustness in Zero-Shot Learning

Yücel M. K. , CİNBIŞ R. G. , DUYGULU ŞAHİN P.

ECCV 2020, Workshop on Adversarial Robustness in the Real World, Glasgow, United Kingdom, 23 August 2020

V. Graph convolutional networks for region of interest classification in breast histopathology

Aygüneş B., AKSOY S., CİNBIŞ R. G. , KÖSEMEHMETOĞLU K., Önder S., Üner A.

SPIE Medical Imaging, Texas, United States Of America, 15 February 2020

VI. Learning Visually Consistent Label Embeddings for Zero-Shot Learning

- Berkan D., CİNBIŞ R. G. , İKİZLER CİNBIŞ N.
2019 IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, 22 - 25 September 2019
- VII. **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
- VIII. **Image Captioning with Unseen Objects**
Berkan D., CİNBIŞ R. G. , İKİZLER CİNBIŞ N.
British Machine Vision Conference, 9 - 12 September 2019
- IX. **Gradient Matching Generative Networks for Zero-Shot Learning**
Sariyildiz M. B. , CİNBIŞ R. G.
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), California, United States Of America, 16 - 20 June 2019, pp.2163-2173
- X. **Cross-task weakly supervised learning from instructional videos**
Zhukov D., Alayrac J., CİNBIŞ R. G. , Fouhey D., Laptev I., Sivic J.
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), California, United States Of America, 16 - 20 June 2019, pp.3532-3540
- XI. **WEAKLY SUPERVISED DEEP CONVOLUTIONAL NETWORKS FOR FINE-GRAINED OBJECT RECOGNITION IN MULTISPECTRAL IMAGES**
Aygunes B., AKSOY S., CİNBIŞ R. G.
IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Yokohama, Japan, 28 July - 02 August 2019, pp.1478-1481
- XII. **Zero-Shot Object Detection by Hybrid Region Embedding**
Berkan D., Cinbiş R. G. , İkizler Cinbiş N.
British Machine Vision Conference, Newcastle-Upon-Tyne, United Kingdom, 3 - 07 September 2018
- XIII. **Fine-grained object recognition and zero-shot learning in multispectral imagery**
Sumbul G., CİNBIŞ R. G. , AKSOY S.
2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIV. **Attributes2Classname: A discriminative model for attribute-based unsupervised zero-shot learning**
Demirel B., CİNBIŞ R. G. , İKİZLER CİNBIŞ N.
16th IEEE International Conference on Computer Vision (ICCV), Venice, Italy, 22 - 29 October 2017, pp.1241-1250
- XV. **Visual Saliency Estimation via Attribute Based Classifiers and Conditional Random Field**
Demirel B., CİNBIŞ R. G. , İKİZLER CİNBIŞ N.
2016 24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016
- XVI. **Hyperspectral target detection - An experimental study**
GUNYEL B., CİNBIŞ R. G. , Ture S., Gurbuz A. C.
2015 23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015
- XVII. **Multi-fold MIL Training for Weakly Supervised Object Localization**
CİNBIŞ R. G. , Verbeek J., Schmid C.
27th IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Ohio, United States Of America, 23 - 28 June 2014, pp.2409-2416
- XVIII. **Segmentation Driven Object Detection with Fisher Vectors**
CİNBIŞ R. G. , Verbeek J., Schmid C.
IEEE International Conference on Computer Vision (ICCV), Sydney, Australia, 1 - 08 December 2013, pp.2968-2975
- XIX. **Image categorization using Fisher kernels of non-iid image models**
CİNBIŞ R. G. , Verbeek J., Schmid C.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Rhode Island, United States Of America, 16 - 21 June 2012, pp.2184-2191
- XX. **Contextual Object Detection Using Set-Based Classification**

- CİNBIŞ R. G. , Sclaroff S.
12th European Conference on Computer Vision (ECCV), Florence, Italy, 7 - 13 October 2012, vol.7577, pp.43-57
- XXI. **Unsupervised Metric Learning for Face Identification in TV Video**
Cinbiş R. G. , Verbeek J., Schmid C.
IEEE International Conference on Computer Vision (ICCV), Barcelona, Spain, 6 - 13 November 2011, pp.1559-1566
- XXII. **Learning Actions From the Web**
İKİZLER CİNBIŞ N., CİNBIŞ R. G. , Sclaroff S.
12th IEEE International Conference on Computer Vision, Kyoto, Japan, 29 September - 02 October 2009, pp.995-1002
- XXIII. **Human action recognition with line and flow histograms**
İKİZLER CİNBIŞ N., CİNBIŞ R. G. , DUYGULU ŞAHİN P.
2008 19th International Conference on Pattern Recognition, Tampa, FL, USA, 8 - 11 December 2008
- XXIV. **Recognizing actions from still images**
İKİZLER CİNBIŞ N., CİNBIŞ R. G. , PEHLİVAN S., DUYGULU ŞAHİN P.
2008 19th International Conference on Pattern Recognition, Tampa, FL, USA, 8 - 11 December 2008
- XXV. **Automatic Mapping of Linearwoody Vegetation Features in Agricultural Landscapes**
AKSOY S., AKÇAY H. G. , CİNBIŞ R. G. , Wassenaar T.
IGARSS 2008 - 2008 IEEE International Geoscience and Remote Sensing Symposium, Boston, MA, USA, 7 - 11 July 2008
- XXVI. **Relative Position-Based Spatial Relationships using Mathematical Morphology**
CİNBIŞ R. G. , AKSOY S.
2007 IEEE International Conference on Image Processing, San Antonio, TX, USA, 16 September - 19 October 2007
- XXVII. **Morphological Modeling of Position-Based Spatial Relationships**
CİNBIŞ R. G. , AKSOY S.
2007 IEEE 15th Signal Processing and Communications Applications, Eskisehir, Turkey, 11 - 13 June 2007

Supported Projects

ŞAHİN E., ANKARALI M. M. , KALKAN S., SARANLI U., YAZICIOĞLU Y., CİNBIŞ R. G. , CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Robotik Teknolojileri Araştırma, Geliştirme ve Eğitim Merkezi (ROMER), 2019 - Continues
CİNBIŞ R. G. , TUBITAK Project, Üretken Modelleme Tabanlı Meta-Öğrenme Yaklaşımları, 2020 - 2022
Cinbiş R. G. , Çetin S., H2020 Project, SnapEarth - Fostering Earth Observation market uptake thanks to natural and holistic access to added value data generated through cutting-edge Artificial Intelligence technologies, 2019 - 2022
CİNBIŞ R. G. , TUBITAK Project, Görsel Öge Tanıma Modellerinin Eksik Gözetimli Öğrenimi, 2017 - 2020
CİNBIŞ R. G. , DEMİREL B., Project Supported by Higher Education Institutions, Uzaktan Algılamalı Görüntülerde Detaylı Nesne Tanıma için Çok Kaynaklı Derin Öğrenme, 2018 - 2019

Scientific Refereeing

INTERNATIONAL JOURNAL OF COMPUTER VISION, SCI Journal, October 2019
IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, SCI Journal, September 2019
INTERNATIONAL JOURNAL OF COMPUTER VISION, SCI Journal, August 2019
INTERNATIONAL JOURNAL OF COMPUTER VISION, SCI Journal, May 2019
IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, SCI Journal, May 2019
INTERNATIONAL JOURNAL OF COMPUTER VISION, SCI Journal, March 2019
IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, SCI Journal, January 2019
IEEE TRANSACTIONS ON IMAGE PROCESSING, SCI Journal, September 2018
SIGNAL IMAGE AND VIDEO PROCESSING, Journal Indexed in SCI-E, July 2018
IEEE SIGNAL PROCESSING LETTERS, Journal Indexed in SCI-E, May 2018

INTERNATIONAL JOURNAL OF COMPUTER VISION, SCI Journal, May 2018

IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, SCI Journal, May 2018

PATTERN RECOGNITION, SCI Journal, April 2018

TUBITAK Project, 1511 - TUBITAK Priority Fields Research Technology Development and Innovation PDP, Orta Doğu Teknik Üniversitesi, Turkey, March 2018

IEEE TRANSACTIONS ON IMAGE PROCESSING, SCI Journal, February 2018

COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, Journal Indexed in SCI-E, January 2018

Mobility Activity

Research Scholarship Program, Guest Researcher, Institut de recherche en informatique et en automatique (INRIA), France, 2018 - 2018

Edit Congress and Symposium Activities

BYORK, Panelists, Ankara, Turkey, 2019

Citations

Total Citations (WOS):505

h-index (WOS):12

Invited Talks

Learning to Recognize, Localize and Caption with Limited Supervision, Seminar, Google DeepMind, United Kingdom, September 2019

Learning to Recognize and Localize Without Training Examples, Seminar, INRIA, France, July 2018

Deep Learning of Object Recognition Models Without Training Examples, Seminar, Sabancı Üniversitesi, Turkey, June 2018

Zero-shot Learning and Fine-grained Classification, Seminar, Orta Doğu Teknik Üniversitesi, Turkey, March 2018

Scholarships

French-Turkish Research Fellowship, Other Government Agencies, 2018 - 2018