

T. METIN SEZGIN

Koç University
College of Engineering
Sarıyer, Istanbul, Turkey

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RESEARCH INTERESTS

Intelligent User Interfaces, Multimodal Interfaces, Affective Computing, Artificial Intelligence, Explainable AI in Deep Learning, Machine Learning, Anomaly Detection.

EDUCATION

Massachusetts Institute of Technology, Cambridge MA

PhD in Electrical Engineering and Computer Science, May 2006 GPA: 5.0/5.0

Thesis Title: *Sketch Interpretation Using Multiscale Stochastic Models of Temporal Patterns*

Thesis Committee: *Prof. Randall Davis (advisor),
Prof. Leslie Pack Kaelbling,
Prof. Tomás Lozano-Pérez.*

Qualifier Committee: *Prof. Trevor Darrell,
Prof. Eric Demaine*

Minor Concentration: *Management in Engineering, Sloan School of Management*

Massachusetts Institute of Technology, Cambridge MA

Master of Science degree in Electrical Engineering and Computer Science, May 2001 GPA: 4.86/5.00

Thesis Advisor: *Prof. Randall Davis*

Thesis Title: *Feature Point Detection and Curve Approximation for Early Processing of Free-Hand Sketches*

Syracuse University, LC Smith College of Engineering and Computer Science, Syracuse NY

Bachelor of Science, summa cum laude with Honors in Computer Science May 99.

Ranked 1st in the College of Engineering. GPA: 3.99/4.00 – overall, 4.0/4.0 – core

Honors Thesis Title: *Logic Programming: A Dynamical Systems Approach*

Jamesville DeWitt High School, Syracuse, NY

Regents Diploma, May 95

PROFESSIONAL APPOINTMENTS & TITLES

Koç University, College of Engineering, Istanbul, Turkey

Professor of Computer Engineering (tenured)

02/23 – current

Koç University, College of Engineering, Istanbul, Turkey

Associate Professor of Computer Engineering

05/16 – 02/23

Yale University, Department of Computer Science, New Haven, CT

Visiting Fellow

09/16 – 09/17

Koç University, College of Engineering, Istanbul, Turkey

Assistant Professor of Computer Engineering

01/09 – 04/16

Higher Educational Council of Turkey

University Docent, Computer and Information Sciences

27/01/14

Harvard University, School of Engineering and Applied Sciences, Cambridge MA

Visiting Researcher, Intelligent Interactive Systems Group (appointment via Harvard CMES)

07/10 – 09/10

University of Cambridge, Computer Laboratory, Cambridge UK

Research Associate, Empathic Avatars Project

08/06 – 01/09

HONORS AND AWARDS

National Research Council, Sponsored Research Success Stories Showcase (2019)

The Science Academy, Young Scientist Award (2018)

Honorable Mention Award, Top 5%, ACM CHI 2017 (2017)

Bronze Medal, Haptic Stylus Patent, International Inventions Fair (2016)

Research and Development Directorate Patent Inventor Plaque, Koç University (2015)

The Scientist of the Year Award 2014, Bilim Kahramanlari Dernegi (2014)

Outstanding Young Scientists Award, Turkish Academy of Sciences (2013)

Turk Telekom R&D Technology Transfer Appreciation Plaque (2012)

Turk Telekom Research Collaboration Award (2011)

Harvard – Koç Visiting Scholar (2010)

KOLT Learning and Innovation Grant (2010)

Research Assistantship, Massachusetts Institute of Technology (1999-2006)

Earl H. Devoe Prize for Outstanding Undergraduate Research, Syracuse University (1999)

Warren Semon Prize for Outstanding Achievement in Computer Science, Syracuse University (1999)

Syracuse University 1998-1999 Remembrance Scholar

Second place in the Martin and Phyllis Berman Competition for innovative Computer Programs (1998)

Third Place in the Martin and Phyllis Berman Competition for innovative Computer Programs (1997)

Member of NY β chapter of Tau Beta Pi Honor Society at Syracuse University

Member of Phi Kappa Phi Honor Society at Syracuse University

Honorary Scholarship from Syracuse University covering full undergraduate tuition (8 semesters)

Enrollment in the Upper Division Honors Program at Syracuse University.

L.C. Smith College of Eng. and Computer Science PRIDE 4.0 Club Certificate for Civic and Academic Excellence.

Dean's List (All semesters at Syracuse University)

ACADEMIC SYNOPSIS

Cumulative citations: 2700+

G-Index: 50

i10-index: 51

H-Index: 25

STUDENT SUPERVISION & POSTDOCS

Postdoctoral Research Associates

Yusuf Sahillioğlu Project Title: Current position:	IUI Lab, Koç University, Postdoctoral Research Associate iMotion, Intelligent Multimodal Motion Retrieval Assistant Professor, Middle East Technical University, Turkey	01/14 – 10/14
Neşe Alyüz Çivitçi Project Title: Current position:	IUI Lab, Koç University, Postdoctoral Research Associate Formative Affective Interfaces Intel Labs, Seattle, US	11/13 – 01/15
Başak Alper Project Title: Current position:	IUI Lab, Koç University, Postdoctoral Research Associate Intelligent Interfaces for eLearning NASA, Jet Propulsion Laboratory	09/13 – 09/14

PhD Supervision – Alumni

Berker Türker Dissertation Title:	Koç University, PhD in Computer Engineering Affect Burst Detection and Recognition (co-supervised)	09/13 – 09/23
Alpay Sabuncuoğlu Dissertation Title:	Koç University, PhD in Computer Engineering Accessible eLearning Interfaces	08/18 – 06/23
Bushra Sadia Dissertation Title:	Koç University, PhD in Computational Science and Engineering Tactile Rendering of Digital Buttons and Shapes on Touchscreens Using Novel Surface Haptics Technologies (co-supervised)	09/16 – 09/21
Ezgi Senem Emgin Dissertation Title:	Koç University, PhD in Computational Science and Engineering HapTable: An Interactive Tabletop Providing Online Haptic Feedback for Surface Gestures (co-supervised)	01/12 – 01/20
Çağla Çığ Dissertation Title:	Koç University, PhD in Computer Engineering Gaze-Aware Predictive Multimodal Interfaces	09/11 – 02/17
Çağlar Türkaz Dissertation Title:	Sabancı University, PhD in Electrical and Computer Engineering Sketch and Attribute Based Query Interfaces (co-supervised) Thesis work has received the Dr. Gürsel Sönmez Research Award, Only three awarded in the College of Engineering & Natural Sciences	09/09 – 05/15
Sinan Tümen Dissertation Title:	Koç University, PhD in Electrical and Computer Engineering Learning Stroke Fragmentation and Sketch Segmentation	09/09 – 09/15
Ayşe Küçükylmaz Dissertation Title:	Koç University, PhD in Computational Sciences and Engineering Haptic Role Allocation and Intention Negotiation in Human-Robot Collaboration (co-supervised) Thesis work received the Koç University Academic Excellence Award, Only one awarded in the Graduate School of Engineering & Sciences	09/08 – 06/13

MS Supervision – Alumni

Muhammed Korkmaz Dissertation Title:	Koç University, M.Sc. in Computer Engineering HAISTA-NET: Human Assisted Instance Segmentation Through Attention	09/20 – 09/23
Ezgi Dede Dissertation Title:	Koç University, M.Sc. in Computer Engineering SketchNet	08/19 – 09/23

Gürkan Soykan Dissertation Title:	Koç University, M.Sc. in Computer Engineering Multimodal Processing of Visual Story Narratives (co-supervised)	09/20 – 09/23
Gokce Iymen Dissertation Title:	Koç University, M.Sc. in Computer Engineering Title: Intelligent Emotional Voice Conversion with StarGAN Assisted by DTW and Speaker Classifier	08/20 – 09/22
Baris Batuhan Topal Dissertation Title:	Koç University, M.Sc. in Computer Engineering Domain-adaptive Self-supervised Pre-training for Face & Body Detection in Drawings (co-supervised)	08/20 – 08/22
Alara Zindancioglu Dissertation Title:	Koç University, M.Sc. in Computer Engineering Perceptually Validated Precise Local Editing for Facial Action Units with StyleGAN	08/19 – 01/22
Öykü Bayramoğlu Dissertation Title:	Koç University, M.Sc. in Computer Engineering Engagement Modeling in Human-Robot Interaction (co-supervised)	09/19 – 01/22
Alican Akman Dissertation Title:	Koç University, M.Sc. in Computer Engineering Deep Models for Generation of 3D Human Models and Animations from Sketches	08/17 – 08/20
Zana Buçinca Dissertation Title:	Koç University, M.Sc. in Computer Engineering Incorporating Affect into Dialog Generation	08/16 – 05/19
Ozan Can Altıok Dissertation Title:	Koç University, M.Sc. in Computer Engineering Multimodal Interfaces for Motion Retrieval	08/15 – 01/19
Kurmanbek Kaiyrbekov Dissertation Title:	Koç University, M.Sc. in Computer Engineering Stroke-based Sketched Symbol Segmentation And Generation (Deep Learning)	08/15 – 08/18
Kemal Tuğrul Dissertation Title:	Koç University, M.Sc. in Computer Engineering Sketch Recognition with Few Examples	09/13 – 08/16
Şerike Çakmak Dissertation Title:	Koç University, M.Sc. in Computer Engineering Clustering Free-Form Sketch Scenes through Perceptual Similarity	09/13 – 08/16
Cansu Şen Dissertation Title:	Koç University, M.Sc. in Computer Engineering Semi-Supervised Multimodal Intelligent Content Translator	09/13 – 09/16
Shabbir Marzban Dissertation Title:	Koç University, M.Sc. in Computer Engineering Affect Burst Detection and Recognition (co-supervised)	09/13 – 08/15
Banuçiçek Gürcüoğlu Dissertation Title:	Koç University, M.Sc. in Computer Engineering Learning People's Perception of Messiness for Hand-drawn Sketches	09/11 – 09/14
Atakan Arasan Dissertation Title:	Koç University, M.Sc. in Computer Engineering Haptic Stylus with Inertial and Vibro Tactile Feedback (co-supervised)	09/11 – 05/14
Özem Kalay Dissertation Title:	Koç University, M.Sc. in Computer Engineering Detection of Recognition Errors from Eye Gaze Behavior in Sketch Recognition Interfaces	09/11 – 08/14
Burak Özen Dissertation Title:	Koç University, M.Sc. in Computer Engineering A Simple Resource-Aware Approach to Sketch Recognition via Style Identification	09/11 – 06/13
Erelcan Yanık Dissertation Title:	Koç University, M.Sc. in Computer Engineering Active Learning for Sketch Recognition	09/11 – 06/13

Ö. Özgür Ögüz *Koç University, M.Sc. in Electrical and Computer Engineering* 09/08 – 06/10
 Dissertation Title: *A Negotiation Model for Affective Visuo-Haptic Communication Between a Human Operator and a Machine (co-supervised)*

MS Supervision – Ongoing

Egecan Esen *Koç University, M.Sc. in Computer Engineering* 09/22 – current
 Dissertation Title: *BCI for Detection of Cybersickness Neuromarkers (co-supervised)*

Aleyna Kütük *Koç University, M.Sc. in Computer Engineering* 09/21 – current
 Dissertation Title: *Perceptual Recognition and Synthesis of Sketches*

Undergraduate Supervision (selected)

Birkan Çelik *Koç University, Undergraduate Research Student* 07/19 – 09/22
 Project Title: *Perception-based Sketch Processing*

Ahmet Bağlan *Koç University, Summer Research Student, Boğaziçi University* 07/16 – 09/16
 Project Title: *Sketch Auto-Completion by Grouping Classes*

Amirhossein Sayyafan *Koç University, Summer Research Student, Sharif U. of Technology* 07/16 – 09/16
 Project Title: *Demonstration of Sketch Auto-Completion in Real Life*

Arda İçmez *Koç University, Summer Research Student, Galatasaray University* 07/16 – 09/16
 Project Title: *Acceleration of Sketch Auto-Completion using Parallel Computing*

Elif Yağmur Eyrice *Koç University, Summer Research Student, Bilkent University* 07/16 – 09/16
 Project Title: *Demonstration of Sketch Auto-Completion in Real Life*

Semih Günel *Koç University, Summer Research Student, Bilkent University* 07/16 – 09/16
 Project Title: *Algorithm Optimization in Sketch Auto-Completion*

Tuğrulcan Elmas *Koç University, Summer Research Student, Bilkent University* 07/16 – 09/16
 Project Title: *Using Sketch Auto-Completion in Video Retrieval Engines*

Zahra Montazeri *Koç University, Summer Research Student, Sharif U. of Technology* 06/14 – 08/14
 Project Title: *Visualization of Big Data for e-Learning*

Sardar Bonabi *Koç University, Summer Research Student, Sharif U. of Technology* 06/14 – 08/14
 Project Title: *Efficient Annotation for Semi-Automated Content Translation*

Kemal Tuğrul *Koç University, Summer Research Student, IEU* 06/12 – 08/12
 Project Title: *Effective Data Collection Strategies for Sketch-Based Interfaces*

Anıl Ulutürk *Koç University, Summer Research Student, METU* 06/12 – 08/12
 Project Title: *A Multimodal Question Authoring Tool for Interactive Education*

Zeynep Mavuş *Koç University, Summer Research Student, METU* 06/12 – 08/12
 Project Title: *Pen-Based Intelligent Interactive Geometry Tutor*

Mustafa Tülü *Koç University, Summer Research Student, Gaziantep U.* 06/12 – 08/12
 Project Title: *Fixtures for Ambient Traffic-Density Signage*

Buğra Akyıldız *Koç University, Summer Research Student, Bilkent University* 06/11 – 08/11
 Project Title: *Sketch-Based Retrieval*

Sasa Kostadinovic *Koç University, IEASTE Exchange Student, University of Nis* 06/11 – 08/11
 Project Title: *Web-Services for Sketch Recognition*

Tuğsad Karaduman *Koç University, Summer Research Student* 02/11 – 06/11

<i>Project Title:</i>	<i>Interactive Animation of Graph Algorithms</i>	
<i>Furkan Bayraktar Project Title:</i>	<i>Koç University, Undergraduate Research Student Pen-Based Interfaces for Virtual Physics</i>	<i>06/11 – 06/12</i>
<i>Ozan Okumuşoğlu Project Title:</i>	<i>Koç University, Undergraduate Research Student Pen-Based Interfaces for Virtual Physics</i>	<i>06/11 – 06/12</i>
<i>Aral Can Kaymaz Project Title:</i>	<i>Koç University, Undergraduate Research Student Multimodal Storyboarding for Virtual Cinematography</i>	<i>06/11 – 06/12</i>
<i>Atakan Arasan Project Title:</i>	<i>Koç University, Summer Research Student Vibro-Tactile Stylus</i>	<i>06/10 – 09/10</i>
<i>Emrah Şamdan Project Title:</i>	<i>Koç University, Summer Research Student Robust Primitive Extraction for Free-Hand Strokes</i>	<i>06/10 – 09/10</i>
<i>İsmail Ulutürk Project Title:</i>	<i>Koç University, Summer Research Student 2D Sketch Recognition</i>	<i>06/10 – 09/10</i>
<i>Relja Arandjelovic Project Title:</i>	<i>University of Cambridge, Summer UROP Information Fusion for Sketch Recognition</i>	<i>06/08 – 08/08</i>
<i>Yuan Cao Zhang Project Title:</i>	<i>University of Cambridge, Summer UROP Web-based Emotion Labeling Game</i>	<i>06/08 – 09/08</i>
<i>Alexander Blessing Project Title:</i>	<i>University of Cambridge, Summer UROP A Multimodal Scenario Editor for Driving Simulators</i>	<i>06/08 – 09/08</i>
<i>Dingli Zuo Project Title:</i>	<i>University of Cambridge, Summer UROP An Efficient Framework for Video Annotation</i>	<i>06/07 – 09/07</i>
Part II Supervision (University of Cambridge)		
<i>Andy Prichard Project Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis Polygonal Mesh Reconstruction from Medical Images</i>	<i>09/08 – 05/09</i>
<i>Devan Mahadeshwar Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis Laser Pointer Interaction with Projected Computer Displays</i>	<i>09/07 – 05/08</i>
<i>Alison Shaw Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis Modeling Using Dynamics</i>	<i>09/07 – 05/08</i>
<i>Phillip M. Bielby Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis Face-tracking via Vicon Motion Capture System & Multiple Cameras</i>	<i>09/06 – 05/07</i>
<i>Sergei Trofimov Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis A Multimodal Interface for Creating Graphical Models</i>	<i>09/06 – 05/07</i>
<i>Gareth P. Bailey Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis Directly Controlled Animation Using the Vicon System</i>	<i>09/06 – 05/07</i>
<i>Rebecca Mahoney Thesis Title:</i>	<i>University of Cambridge, Part II Project, Undergraduate Thesis An Online Test Environment: Evaluating the Use of Affective Inference in the Thinking Skills Assessment</i>	<i>09/06 – 05/07</i>

SCHOLARLY WORK

Book Chapters

1. **T. M. Sezgin**, *Online Interpretation of Sketched Drawings*, Book chapter in *Sketch Based Interfaces and Modelling for Product Design*, River Publishing, Book Chapter. (2022).
2. **T. M. Sezgin**, *Explainable Artificial Intelligence*, Contributed Article, *Softtech Technology Trend Report*. (2020).
3. Küçükylmaz, S. O. Öğüz, **T. M. Sezgin**, Ç. Başdoğan. **Improving Human-computer Cooperation through Haptic Role Exchange and Negotiation**, Immersive Multimodal Interactive Presence: Person-Object, Person-Object-Person and Person-Person Scenarios, *Springer Series on Touch and Haptic Systems*, Book Chapter. (2012).
4. H.A. Blair, F. Dushin, D.W. Jakel, A.J. Rivera and **T. M. Sezgin**. **Continuous Models of Computation for Logic Programs**. Book chapter in *The Logic Programming Paradigm: A 25-Year Perspective*, Springer Series in Artificial Intelligence, Book Chapter. (1999).

Edited Journal Issues

1. Biswas, P., Orero, P., **Sezgin, T.M.**, *Special Issue on Intelligent Interaction Design*, *AIEDAM Special Issue*, Volume 33, Number 4, Guest Editor, (2020).
2. **T. M. Sezgin**, *Computers and Graphics*, Special Section on SBIM, CAe, NPAR – Expressive 2015, Volume 59, October 2016, Guest Editor, (2016).
3. T. Isenberg, P. Asente, J. Collomosse, **T. M. Sezgin**, *Computers and Graphics*, Computational Aesthetics, Non-Photorealistic Animation and Rendering, and Sketch Based Interfaces and Modeling, Special Issue, October 2012, Guest Editor, (2012).

Refereed Publications

1. A. Triantafyllopoulos, B. Schuller, G. İymen, **T. M. Sezgin**, X. He, Z. Yang, P. Tzirakis, S. Liu, S. Mertes, E. André, R. Fu, J. Tao, **An Overview of Affective Speech Synthesis and Conversion in the Deep Learning Era**, *Proceedings of the IEEE*, (2023).
2. E. Kesim, T. Numanoglu, O. Bayramoglu, B. Turker, N. Hussain, T. M. Sezgin, Y. Yemez, E. Erzin, **The eHRI database: a multimodal database of engagement in human-robot interactions**. *Language Resources & Evaluation*, (2023).
3. A. Akman, Y. Sahillioğlu, **T. M. Sezgin**, **Deep Generation Of 3D Articulated Models And Animations From 2D Stick Figures**, *Computers & Graphics*, Vol: 109, pp: 65-74, (2022).
4. N. Hussain, E. Erzin, **T. M. Sezgin**, Y. Yemez, **Training Socially Engaging Robots: Modeling Backchannel Behaviors with Batch Reinforcement Learning**, *IEEE Transactions on Affective Computing*, vol. 13, no. 4, pp. 1840-1853, 1 Oct.-Dec., (2022).
5. A. Sabuncuoğlu, **M. T. Sezgin**, **Kart-ON: An Extensible Paper Programming Strategy for Affordable Early Programming Education**, *Proceedings of the ACM on Human-Computer Interaction*, Article 170, (2022).
6. A. Sabuncuoğlu, **M. T. Sezgin**, **Prototyping Products using Web-based AI Tools: Designing a Tangible Programming Environment with Children**, *International Conference on Computing, Design and Making in Education*, Copenhagen, Denmark, May 30-31, (2022).
7. R. S. Tumen, **T.M. Sezgin**, **Segmentation and Recognition of Offline Sketch Scenes Using Dynamic Programming**, *IEEE Computer Graphics and Applications*, Vol: 42, Issue: 2, pp 56-72, (2021). **Feature Article**

8. *A. Sabuncuoğlu, A. E. Yantac, T. M. Sezgin, Teaching K-12 Classrooms Data Programming: A Three-Week Workshop with Online and Unplugged Activities, IEEE VIS Workshop on Data Vis Activities, (2021)*
9. *A Zindancioğlu, T.M. Sezgin, Perceptually Validated Precise Local Editing for Facial Action Units with StyleGAN, arXiv preprint arXiv:2107.12143, (2021).*
10. *Ö.Z. Bayramoglu, E. Erzin, T.M. Sezgin, Y. Yemez, Engagement Rewarded Actor-Critic with Conservative Q-Learning for Speech-Driven Backchannel Generation in Human-Robot Interaction, 23rd ACM International Conference on Multimodal Interaction Montreal, Canada. October 18-22, (2021).*
11. *K.T. Yesilbek, T.M. Sezgin, On Training Sketch Recognizers for New Domains, Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2021, pp. 2142-2149*
12. *Z. Bucinca, Y. Yemez, E. Erzin, T. M. Sezgin, AffectON: Incorporating Affect into Dialog Generation, IEEE Transactions on Affective Computing, Vol: 11, No: 3, Dec, (2020).*
13. *A. Sabuncuoğlu, M. T. Sezgin, Kart-ON: Affordable Early Programming Education with Shared Smartphones and Easy-to-Find Materials, IUI '20: Proceedings of the 25th International Conference on Intelligent User Interfaces Companion. (2020).*
14. *A. Akman, Y. Sahillioğlu, T. M. Sezgin, Generation of 3D Human Models and Animations Using Simple Sketches, Graphics Interfaces, (2020).*
15. *B. Sadia, S. E. Emgin, T. M. Sezgin and Ç. Başdoğan, Data-Driven Vibrotactile Rendering of Digital Buttons on Touchscreens, International Journal of Human-Computer Studies, Vol. 135 (2020).*
16. *A. Bonnici, A. Akman, G. Calleja, K. P. Camilleri, P. Fehling, A. Ferreira, F. Hermuth, J. H. Israel, T. Landwehr, J. Liu, N. M. J. Padfield, T. M. Sezgin, and P. L. Rosin, Sketch-based interaction and modeling: where do we stand?, Artificial Intelligence for Engineering Design, Analysis and Manufacturing, pp. 1–19, (2019).*
17. *K. Kaiyrbekov, T. M. Sezgin, Deep stroke-based sketched symbol reconstruction and segmentation, IEEE Computer Graphics and Applications, Vol: 40, Issue: 1, pp: 112-126, (2020). Feature Article*
18. *N. Alyuz, T. M. Sezgin, Interpretable Machine Learning for Generating Semantically Meaningful Formative Feedback, CVPR, IEEE Conference on Computer Vision and Pattern Recognition, Workshop on Explainable AI, Long Beach, CA (2019).*
19. *N. Hussain, E. Erzin, T. M. Sezgin, Y. Yemez, Speech Driven Backchannel Generation using Deep Q-Network for Enhancing Engagement in Human-Robot Interaction, INTERSPEECH: Annual Conference of the International Speech Communication Association, Graz, Austria, (2019).*
20. *S. E. Emgin, A. Aghakhani, T. M. Sezgin, C. Basdogan, Haptable: An Interactive Tabletop Providing Online Haptic Feedback for Touch Gestures, IEEE Transactions on Visualization and Computer Graphics, Vol: 25, Issue: 9, pp. 2749-2762, (2019).*
21. *N. Hussain, E. Erzin, T. M. Sezgin, Y. Yemez, Batch Recurrent Q-Learning for Backchannel Generation Towards Engaging Agents” 8th International Conference on Affective Computing and Intelligent Interaction (ACII), (2019).*
22. *B. Türker, E. Erzin, Y. Yemez, and T. M. Sezgin, Audio-Visual Prediction of Head-Nod and Turn-Taking Events in Dyadic Interactions, Proc. Interspeech 2018, Hyderabad, India (2018).*
23. *L. Devillers and S. Rosset and G. Dubuisson Duplessis and L. Bechade and Y. Yemez and B. B. Turker and T. M. Sezgin and E. Erzin and K. El Haddad and S. Dupont and P. Deleglise and Y. Esteve and C. Lailler and E. Gilmartin and N. Campbell, Multifaceted Engagement in Social Interaction with a Machine: The JOKER Project, 2018 13th IEEE International Conference on Automatic Face & Gesture Recognition (FG 2018), Xi'an, China, pp. 697-701, (2018).*

24. E. Marchi, B. Schuller, A. Baird, S. Baron-Cohen, A. Lassalle, H. O’Rielly, D. Pigat, P. Robinson, I. Davies, T. Baltrusaitis, O. Golan, S. Fridenson-Hayo, S. Tal, S. Newman, N. Meir-Goren, A. Camurri, S. Piana, S. Bolte, **T. M. Sezgin**, N. Alyuz, A. Rynkiewicz, A. Baranger, **The ASC-Inclusion Perceptual Serious Gaming Platform for Autistic Children**, *IEEE Transactions on Games*, Vol: 11, No: 4, (2018).
25. Ç. Çığ and **T. M. Sezgin**, **Gaze-based predictive user interfaces: Visualizing user intentions in the presence of uncertainty**, *International Journal of Human-Computer Studies*, Vol: 111, pp. 78-91, (2018).
26. Kebude, D., Eteke, C., **Sezgin, TM**, Akgun, B., **Communicative Cues for Reach-to-Grasp Motions: From Humans to Robots**, *International Conference on Autonomous Agents and Multiagent Systems*, July 10-15, Stockholm, Sweden, (2018).
27. B. Alper, N. Riche, F. Chevalier, J. Boy, **T. M. Sezgin**, **Visualization Literacy at Elementary School**. In *Proceedings of ACM CHI 2017, Conference on Human Factors in Computing Systems*, Denver CO, May 6-11, (2017). **CHI 2017 Honorable Mention Award**
28. B. B. Türker, Y. Yemez, **T. M. Sezgin**, E. Erzin, **Audio-Facial Laughter Detection in Naturalistic Dyadic Conversations**, *IEEE Transactions on Affective Computing*, Vol: 8, No: 4, pp. 534-545, (2017).
29. K. T. Yeşilbek, **T. M. Sezgin**, **Sketch Recognition with Few Examples**, *Computers and Graphics*, Vol: 69, pp. 80-91, (2017).
30. B. Alper, N. H. Riche, F. Chevalier, J. Boy and **T. M. Sezgin**, **Visualization Literacy at Elementary School**, *Conference on Pen and Touch Technology in Education*, Evanston, IL, USA, Oct 12-14, (2017).
31. Y. Sahillioglu, **T. M. Sezgin**, **Sketch-based Articulated 3D Shape Retrieval**, *IEEE Computer Graphics and Applications*, Vol: 37, No: 6, pp. 88-101, (2017).
32. Rudakova, V., Lin, N., Trayan, N., Sezgin, T.M., Dorsey, J., Rushmeier, H., **CHER-ish: A sketch- and image-based system for 3D representation and documentation of cultural heritage sites**, *Proceedings of the Eurographics Symposium on Graphics and Cultural Heritage*, Graz, Austria, September 27, (2017).
33. O. C. Altıok, T. M. Sezgin, **Characterizing User Behavior for Speech and Sketch-based Video Retrieval Interfaces**, *Proceedings of Expressive 2017, Posters, Artworks, and Bridging Papers*, the Eurographics Association, Los Angeles, CA, USA, July 29-30, (2017).
34. Kebude, D., **Sezgin, TM**, Akgun, B., **Exploring Communicative Arm Motion for Human-Robot Interaction**, *Robotics: Science and Systems, Workshop on Mathematical Models, Algorithms, and Human-Robot Interaction*, July 15, Boston, MA, (2017)
35. B. B. Türker, Z. Buçinca, E. Erzin, Y. Yemez, **T. M. Sezgin**, **Analysis of Engagement and User Experience with a Laughter Responsive Social Robot**, *Interspeech 2017, Proceedings of the Annual Conference of the International Speech Communication Association*, Stockholm, Sweden, Aug 20-24, (2017)
36. W. Shi, Z. Wang, **T. M. Sezgin**, J. Dorsey, and H. Rushmeier, **Material Design in Augmented Reality with In-Situ Visual Feedback**, *Proceedings of the Eurographics Symposium on Rendering*, Helsinki, Finland, June 19-21, (2017).
37. O. Altıok, K. T. Yeşilbek, **T. M. Sezgin**, **What Auto Completion Tells Us About Sketch Recognition**. In *Proceedings of Expressive 2016, Posters, Artworks, and Bridging Papers*, the Eurographics Association, Lisbon, Portugal, May 7-9, (2016).
38. Ş. Çakmak, **T. M. Sezgin**, **Building a Gold Standard for Perceptual Sketch Similarity** . In *Proceedings of Expressive 2016, Posters, Artworks, and Bridging Papers*, the Eurographics Association, Lisbon, Portugal, May 7-9, (2016).
39. Ç. Çığ, **T. M. Sezgin**, **Gaze-Based Biometric Authentication: Hand-Eye Coordination Patterns as a Biometric Trait**. In *Proceedings of Expressive 2016, Posters, Artworks, and Bridging Papers*, the Eurographics Association, Lisbon, Portugal, May 7-9, (2016).

40. C. Tanase, I. Giangreco, L. Rossetto, H. Schuldt, O. Seddati, S. Dupont, O. C. Altiok, **T. M. Sezgin**, **Semantic Sketch-Based Video Retrieval with Autocompletion**, *Proceedings of the 21st International Conference on Intelligent User Interfaces (IUI 2016)*, ACM, March 7–10, 2016, Sonoma, CA, USA, (2016).
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74. **T. M. Sezgin**, I. Davies, P. Robinson, **Multimodal Inference for Driver-Vehicle Interaction**. *Workshop on Multimodal Interfaces for Automotive Applications, International Conference on Intelligent User Interfaces, Sanibel, Florida, USA, February (2009).*
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81. **T. M. Sezgin** and R. Davis. **Scale-space Based Feature Point Detection for Digital Ink**. *In Proceedings of the ACM SIGGRAPH 2007 Papers, International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH '07). ACM, New York, NY, USA, (2007).*
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86. **T. M. Sezgin**. **Overview of Recent Work in Pen-Centric Computing**. *Invited Workshop on Pen-Centric Computing, Providence RI, March 26-28 (2007).*
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1. **Bahar B., Barla I, Boymul Ö., Dicle Ç., Erol B., Saraçlar M., Sezgin T. M., Zelezny M., Mobile-Phone Based Gesture Recognition.** In *Proceedings of eINTERFACE'07, The Summer Workshop on Multimodal Interfaces, Istanbul, Turkey* (2007).
2. **Savran, A., Celiktutan, O., Akyol, A., Trojanova, J., Dibeklioglu, H., Esenlik, S., Bozkurt, N., Demirkir, C., Akagunduz, E., Caliskan, K., Alyuz, N., Sankur, B., Ulusoy, I., Akarun, L., and Sezgin, T. M., 3D Face Recognition Performance Under Adversarial Conditions.** In *Proceedings of eINTERFACE'07, The Summer Workshop on Multimodal Interfaces, Istanbul, Turkey* (2007).
3. **T. M. Sezgin and R. Davis. Modeling Sketching as a Dynamic Process.** In *Proceedings of CSAIL Student Workshop '05 Gloucester, MA* (2005).
4. **T. M. Sezgin and R. Davis. Efficient search space exploration for sketch recognition.** In *MIT Computer Science and Artificial Intelligence Laboratory Annual Research Abstract.* (2004).
5. **T. M. Sezgin and R. Davis. Early Sketch Processing with Application in HMM Based Sketch Recognition.** In *MIT Computer Science and Artificial Intelligence Laboratory Technical Report AIM-2004-016,* (2004).
6. **T. M. Sezgin. Recognition efficiency issues for freehand sketches.** *Proceedings of the MIT Student Oxygen Workshop. Gloucester, MA.* (2003).
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9. **C. Alvarado, T. M. Sezgin, D. Scott, T. Hammond, Z. Kasheff, M. Oltmans, and R. Davis. A Framework for Multi-Domain Sketch Recognition.** In *MIT Artificial Intelligence Laboratory Annual Abstract.* (2001).
10. **T. M. Sezgin and R. Davis. Scale-space Based Feature Point Detection for Noisy Digital Curves.** In *MIT Artificial Intelligence Laboratory Annual Abstract.* (2001).

PATENTS & INVENTION DISCLOSURES

Patent applications

European Patent Application,

T. M. Sezgin, C. Şen, Semi-Automatic Web Page Content Retargeting System,
PCT/EP2015/067681, European Patent Office, July 2015.

European Patent Application, Granted

T. M. Sezgin, Ö. Kalay, Gaze-Based Detection of Intention to Fix Misrecognitions,
PCT/TR2015/00015, European Patent Office, March 2015.

European Patent Application, Granted

T. M. Sezgin, Ç. Çiğ, Gaze-Based Mode Inference for Pen-Based Interaction,
PCT/TR2014/00189, European Patent Office, May 2014.

European Patent Application,

T. M. Sezgin, C. Başdoğan, A. Arasan, A Stylus (Vibrotactile Stylus),
PCT/EP2013/057748, European Patent Office, April 2013.

Invention Disclosures

Under review, Ç. Çiğ, **T. M. Sezgin**, *BBF # 2015.6.X*

Koç University, Research, Project Development and Technology Transfer Directorate

Semi-Automatic Web Page Content Retargeting System, C. Şen, **T. M. Sezgin**, *BBF # 2014.10.X*

Koç University, Research, Project Development and Technology Transfer Directorate

Gaze-Based Detection of Intention to Fix Misrecognitions, O. Kalay., **T. M. Sezgin**, *BBF # 2014.10.X*

Koç University, Research, Project Development and Technology Transfer Directorate

Gaze-Based Mode Inference for Pen-Based Interaction, Ç. Çiğ, **T. M. Sezgin**, *BBF # 2013.03.002*

Koç University, Research, Project Development and Technology Transfer Directorate

Haptic Stylus Having Inertial & Vibro-Tactile Feedback, A. Arasan, Ç. Başdoğan, **T. M. Sezgin**, *BBF # 2012.10.X*

Koç University, Research, Project Development and Technology Transfer Directorate

Auto-Completion in Sketch Recognition, **T. M. Sezgin**, B. Yanıkoğlu, Ç. Tırkaz, *BBF # 2011.03.X*

Koç University, Research, Project Development and Technology Transfer Directorate

Recognition and Fragmentation of Hand-Drawn Curves, **T. M. Sezgin**, S. Tümen, *BBF # 2010.08.003*

Koç University, Research, Project Development and Technology Transfer Directorate

GRANTS

- Acronym:** GENESIS
Source: *European Commission ERA-Net Program, Advanced Brain-Computer Interfaces Call*
Title: *Leveraging Neuromarkers for Next-Generation Immersive Systems*
Consortium: *University of Lille (coordinator), Koç University, Inria, ETH Zurich*
Role: *Principal Investigator, Koç University*
Duration: *2023 – 2026*
- Acronym:** EPILEPSY
Source: *Health Institutes of Turkey*
Title: *3D Sonification for Localization of Seizure Localization*
Consortium: *School of Medicine, Media and Visual Arts, Koc University*
Role: *Co-Investigator, Koç University*
Duration: *2022 – 2024*
- Acronym:** CHEM-AI
Source: *Scientific & Technological Research Council of Turkey, 1512 Program*
Title: *Active Learning for Chemical Design (Hayat Kimya)*
Role: *Principal Investigator, Koç University*
Duration: *2022 – 2024*
- Acronym:** *SketchNet*
Source: *Scientific & Technological Research Council of Turkey, 1001 Program*
Title: *Perception Based Sketch Processing*
Role: *Principal Investigator, Koç University*
Duration: *2020 – 2023*
- Acronym:** *1003S*
Source: *Scientific & Technological Research Council of Turkey, High Priority Areas R&D Program*
Title: *Tangible Intelligent Interfaces for Teaching Computational Thinking Skills*
Role: *Principal Investigator, Koç University*
Duration: *2019 – 2022*
- Acronym:** *1001*
Source: *Scientific & Technological Research Council of Turkey, 1001 Program*
Title: *Backchannel Feedback Modeling for Human-Computer Interaction*
Role: *Co-PI, Koç University*
Duration: *2018 – 2020*
- Acronym:** JOKER
Source: *European Commission ERA-Net Program, CHIST-ERA Intelligent User Interfaces Call*
Title: *Joke and Empathy of a Robot/ECA: Towards Social and Affective Relations with a Robot*
Consortium: *CNRS-LIMSI (coordinator), Koç University, University College Dublin, LIUM, Univ. of Mons*
Role: *Principal Investigator, Koç University*
Duration: *2013 – 2016*
- Acronym:** *iMotion*
Source: *European Commission ERA-Net Program, CHIST-ERA Intelligent User Interfaces Call*
Title: *Intelligent Multimodal Augmented Video Motion Retrieval System*
Consortium: *University of Basel (coordinator), Koç University, University of Mons*
Role: *Principal Investigator, Koç University*
Duration: *2013 – 2016*
- Acronym:** ASC-Inclusion
Source: *European Commission STREP, FP7-ICT-2013-10, ICT-2013.11.4*
Title: *Internet-Based Environment for Social Inclusion of Children w/Autism Spectrum Conditions*
Consortium: *Technische Universität München (coordinator), University of Cambridge, Koç University, Bar Ilan University, Compedia Ltd., Karolinska Institutet, Univ. of Genoa, Spectrum ASC-MED*
Role: *Principal Investigator, Koç University*
Duration: *2013 – 2014*

Acronym: 1003
Source: *Scientific & Technological Research Council of Turkey, High Priority Areas R&D Program*
Title: *Intelligent Interfaces for eLearning*
Role: *Principal Investigator, Koç University*
Duration: 2013 – 2016

Acronym: SANTEZ
Source: *SANTEZ Programme, Ministry of Science, Industry, and Technology, Turkey*
Title: *Semi-supervised Intelligent Multimodal Content Translator for Smart TVs*
Role: *Principal Investigator, Koç University*
Duration: 2012 – 2015

Acronym: *SmartGestures*
Source: *Koç Sistem R&D Programme*
Title: *Gesture-Based Interfaces*
Role: *Co-PI, Koç University*
Duration: 2011 – 2013

Acronym: *Career-TR*
Source: *Career Grant, Scientific and Technological Research Council of Turkey*
Title: *Pen-based Multimodal Intelligent User Interfaces*
Role: *Principal Investigator, Koç University*
Duration: 2011 – 2014

Acronym: *TT-RD*
Source: *Türk Telekom R&D Programme*
Title: *Educational Sketch-Based Intelligent Interfaces*
Role: *Principal Investigator, Koç University*
Duration: 2010 – 2013

Acronym: *KOLT*
Source: *KOLT Teaching Innovation Grant*
Title: *Interactive Intelligent Sketching Board*
Role: *Principal Investigator, Koç University*
Duration: 2010 – 2011

Acronym: *DeepGreen I*
Source: *DARPA/SAIC (Science Applications International Corporation)*
Title: *Deep Green: Commander's Associate (sketch-to-plan module)*
Role: *co-PI for the sketch-to-plan module, Koç University*
Duration: 2008 – 2009

Acronym: *DeepGreen II*
Source: *DARPA/BAE/SIFT (British Aerospace/Smart Information Flow Technologies)*
Title: *Deep Green: Commander's Associate (sketch-to-plan module)*
Role: *Subcontractor, Koç University*
Duration: 2008 – 2009

GRANTS – Summary and Quantitative Metrics

Summary of the major grants: Scale, and significance of the funding budget is better reflected in the number of students/postdoc man-months supported by each grant, as indicated in the last column.

Acronym	Funding Type	Duration in months	Status	Budget and scope of support
CHEM-AI	National	18	Ongoing	1 research engineer for 18 months, Equipment & Travel
EPILEPSY	National	24	Ongoing	2 graduate students for 24 months, Equipment & Travel
GENESIS	European Union ERA-NET	36	Approved	2 graduate students, 1 postdoc for 3 years, Equipment & Travel
SketchNet	National	24	Ongoing	3 graduate students for 2 years, Equipment & Travel
1001	National	24	Ongoing	3 graduate students for 2 years, 1 postdoc for 2 years, Equipment & Travel
Karton	National	24	Ongoing	3 graduate students for 2 years, Equipment & Travel
Deep Green I&II	DARPA	12	Completed	2 graduate students for 1 year, Equipment & Travel
Career-TR	Career Award	36	Completed	3 graduate students for 3 years, Equipment & Travel
iMotion	European Union ERA-NET	36	Completed	2 graduate students for 2 years, 1 postdoc for 18 months, Equipment & Travel
Joker	European Union ERA-NET	36	Completed	2 graduate students for 30M, 1 postdoc for 18 months, Equipment & Travel
ASC Inclusion	European Union, FP7	14	Completed	3 graduate students for 14 M, 1 postdoc for 14 M, Equipment & Travel
eSketch	National	36	Completed	3 graduate students for 3 years, 1 postdoc for 3 years, Equipment & Travel
GEBIP	Turkish Academy of Sciences	36	Completed	Equipment & Travel for three years
Santez	National	30	Completed	2 graduate students for 2 years, Equipment & Travel
Koç Sistem	Industrial	24	Completed	2 graduate students for 2 years, Equipment & Travel
Turk Telekom	Industrial	24	Completed	2 graduate students for 2 years, Equipment & Travel
			TOTAL	798 person-months grad student, 128 person-months postdoc/engineer fund, Equipment & Travel

PROFESSIONAL SERVICE AND AFFILIATIONS**Editorial**

IEEE Transactions on Affective Computing, Associate Editor
IEEE Transactions on Multimedia, Associate Editor
Computers and Graphics, Associate Editor
Graphics and Visual Computing, Associate Editor
AI-EDAM Special Issue on Intelligent Interaction Design, Guest Editor, (2019)
Computers and Graphics, Special Section on Expressive 2015, Guest Editor (2015)
Computers and Graphics, CAe, NPAR, and SBIM Special Issue, Guest Editor (2011)
Koç University Press, Member of the Editorial Board (2015-2016)

Chair / co-chair

Co-chair, Workshop on Visual Analysis of Sketches, ECCV 2016
Co-chair, Expressive 2016
Chair, Expressive 2015
Chair, Sketch Based Interfaces and Modeling 2014
Co-chair, Visual Languages and Computing 2013
Co-chair, Visual Languages and Computing 2012
Associate Chair, International Conference on Multimodal Interaction 2014
Associate Chair, Intelligent User Interfaces 2012
Posters Chair, Sketch Based Interfaces and Modeling 2013
Posters Chair, Sketch Based Interfaces and Modeling 2012
Co-chair, Sketch Based Interfaces and Modeling 2011
Member of the Steering Committee, Expressive International Joint Symposium, CAe, SBIM and NPAR

Program Committee

International Conference on Intelligent User Interfaces (Senior PC Member, 2022)
International Conference on Multimodal Interfaces (Senior PC Member, 2021)
International Joint Conference on Artificial Intelligence, (2020)
IEEE International Conference on Multimedia & Expo, (2020)
International Conference on Multimodal Interfaces (Senior PC Member, 2019)
IEEE International Conference on Artificial Intelligence and Virtual Reality (2018)
International Conference on Multimodal Interfaces (Senior PC Member, 2014)
International Workshop on Emotion, Social Signals, Sentiment & Linked Open Data (2014)
Sketch Based Interfaces and Modeling (SBIM 2007, 2008, 2009)
International Conference on Autonomic and Autonomous Systems
VL/HCC Workshop (2008)
Accessible Graphics (2012)
IUI Workshop on Sketch Recognition (2009)
AISB 2009 Symposium on Affective Bodily Expression
International Workshop on Human Behavior Understanding (2010)
International Workshop on Cognitive Information Processing (2012)

Reviewer

Physics Letters A
The Computer Journal
Pattern Recognition Journal
Journal of Multimodal Interfaces
Computers and Graphics Journal
IEEE Robotics and Automation Letters
Systems, Man and Cybernetics - Part B
Machine Vision and Applications Journal
Computer Vision and Image Understanding
Human Computer-Interaction Journal (HCI)
IEEE Transactions on Image Processing Journal
Eurasip Journal on Advances in Signal Processing
SIGGRAPH
SIGGRAPH Asia
IEEE Haptics Symposium

MIT Student Oxygen Workshop (SOW)
 European Signal Processing Conference
 European Conference on Artificial Intelligence
 International Conference on Multimedia & Expo
 International Joint Conferences on Artificial Intelligence (IJCAI)
 International Conference on Multimodal Interfaces (ICMI)
 ACM Transactions on Interactive Intelligent Systems (TiS)
 User Interface Software and Technology Conference (UIST)
 Tangible Embedded & Embodied Interaction Conference (TES).
 Artificial Intelligence for Engineering Design, Analysis and Manufacturing
 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference

Grant Panels & Reviews

H2020, FET OPEN Call
 Dutch Research Council
 European Research Council
 Foundation for Polish Science
 The Royal Society of New Zealand
 TÜBİTAK (The Scientific and Technological Council of Turkey)

Organizer

MIT Dangerous Ideas Seminar Series
 CVPR Workshop on Sketch-Oriented Deep Learning
 St. Computer Science and Engineering Workshop (co-initiator)

Member

Association for the Advancement of Artificial Intelligence (AAAI)
 Association for Computing Machinery (ACM)
 Institute of Electrical and Electronics Engineers (IEEE)

Other

Global Partnership on Artificial Intelligence (GPAI) Expert
 Founding Vice President, AAAI Chapter of Turkey
 MIT TechLink AI Lab representative
 Turkish SME Development Organization, Innovation and Collaboration R&D Committee
 Koç University iTunes Committee
 Koç University Graduate School of Social Sciences & Humanities TTT Committee Member

TEACHING

Programming Language Concepts	2009-2021
Senior Design Project	2019-2021
Mobile programming	2015-2016
Structure and Interpretation of Computer Programs	2011-2013
Intelligent User Interfaces	2010-2020
Probability and Statistical Methods for Engineers	2009-2013
Introduction to Engineering	2009-2010

BOARD MEMBERSHIPS & CONSULTING

AAAI Chapter of Turkey	Founding Vice President (2020, –)
AAAI Chapter of Turkey	Board Member (2020, –)
Bahçeşehir University, Department of Artificial Intelligence	Advisory Board (2020, –)
Özyeğin University, Department of Computer Science	Advisory Board (2019, –)
İş Bank	Technology Advisory Board (2018, –)
TÜBİTAK Bilim Genç Magazine	Advisory Board (2014-2018)
Koç University Press	Editorial Board (2015)
Koç University Incubation Center	Advisory Board (2014, –)
Koç University Technology Transfer Office	Advisory Board (2013, –)
Inventram Technology	Advisory Board (2011, –)
TOYOTA Motor Corporation	Technology Consultant (2006-2008)

LABORATORY AFFILIATIONS

Koç University	<i>Intelligent User Interfaces Lab, Principal Investigator</i>	2009 – current
Yale University	<i>Computer Graphics Group, Visiting Fellow</i>	2016 – 2017
Harvard University	<i>Intelligent Interactive Systems Group, Visiting Scholar</i>	2010
Koç University	<i>Multimedia Vision & Graphics Lab, Affiliated Faculty</i>	2009 – current
University of Cambridge	<i>Rainbow Group, Research Associate</i>	2006 – 2009
MIT	<i>CSAIL</i>	2003 – 2006
MIT	<i>Artificial Intelligence Laboratory</i>	1999 – 2003

INVITED TALKS, KEYNOTES & PANELS

<i>Keynote: Expression and Perception with Sketches</i> <i>ECCV Workshop on Sketching for Human Expressivity</i>	23/10/22
<i>Invited Talk: Intelligent Interaction: Where machine learning, psychology and HCI meet</i> <i>Technology Society and Professional Development Seminar, Bilkent University, Turkey</i>	09/05/22
<i>Panelist: AI Applications in Defense and Unmanned Systems</i> <i>SAHA EXPO, Defense & Aerospace Hybrid Exhibition, Istanbul, Turkey</i>	13/11/21
<i>AI and Intelligent Interaction</i> <i>International Summer School on AI, Bilgi University & KUIS AI Center, Istanbul</i>	16/08/21
<i>Panelist: Getting a Grasp of Artificial Intelligence</i> <i>DigitalTalks, Istanbul</i>	20/05/20
<i>Machine Learning for Interaction: Psychology-Driven Design of Intelligent Interfaces</i> <i>Science Academy, Summer School on Artificial Intelligence, Bilkent University, Turkey</i>	29/06/20
<i>Technological solutions to technology-driven challenges of the changing societies</i> <i>Turkish-German Frontiers of Social Science Symposium, Leipzig, Germany</i>	24/10/19
<i>Turkish-German Artificial Intelligence Summit</i> <i>Berlin, Germany</i>	22/08/19
<i>Keynote: Future of the Automotive Industry Workshop</i> <i>Stanford University, CA, organized by the Investment Office of the Presidency of Turkey</i>	20/06/19
<i>Panelist: Individuals and Institutions in a World of Artificial Intelligence</i> <i>DigitalTalks, Istanbul</i>	13/11/18
<i>Psychology-Driven Design of Intelligent Interfaces</i> <i>IBM Research, San Jose, CA</i>	19/06/19
<i>Psychology-Driven Design of Intelligent Interfaces</i> <i>Disney Research, Zürich</i>	25/03/19
<i>Panelist: Artificial Intelligence</i> <i>Koc University, Turkey</i>	04/05/18
<i>Keynote: International Researchers, Statisticians and Young Statisticians Congress</i> <i>Cesme, Turkey</i>	30/04/18
<i>Panelist: Human-Machine Symbiosis</i> <i>Undersecretariat of Defense Industries, Ankara, Turkey</i>	28/03/18
<i>Psychology Aware Intelligent Interaction</i> <i>Internationalization Partnership Awards Scheme Workshop, University of Malta, Malta</i>	14/03/18

<i>Artificial Intelligence, Psychology and Mind Reading</i> <i>MIT Club of Turkey, Istanbul, Turkey</i>	10/03/18
<i>Interaction through Subtle Communicative Cues</i> <i>Carnegie Mellon University, Pittsburgh, PA, USA</i>	16/08/17
<i>Enhancing Interaction through Subtle Cues</i> <i>University of California San Diego, San Diego. CA, USA</i>	01/08/17
<i>Psychology and Intelligent User Interaction</i> <i>University of Central Florida, Orlando, FL, USA</i>	21/06/17
<i>Psychology and Intelligent User Interaction</i> <i>Texas A&M University, College Station, TX, USA</i>	15/02/17
<i>Keynote: Past, Present, and the Future of Sketch-Based Interfaces</i> <i>SketchX: Human Sketch Analysis and its Applications, BMVA, London, UK</i>	24/02/16
<i>Seamless Multi-Modal Interaction: Opportunities for Pen-Based Computing</i> <i>Queen Mary University of London, London, UK</i>	25/02/16
<i>Artificial Intelligence and Human Behavior Mining for Intelligent Interaction</i> <i>Artificial Intelligence and Image Processing Gathering, Ankara, Turkey</i>	02/05/15
<i>Artificial Intelligence and Human-Computer Interaction</i> <i>Bilim ve Teknik, Science Seminar Series</i>	07/04/15
<i>Technologies for Smart Interaction and Communication</i> <i>Ministry of Transportation Maritime Affairs and Communication, R&D Workshop, Ankara, Turkey</i>	02/04/15
<i>Enriched Interaction through Inferred Intentions</i> <i>Turkish-German Multimodal Interaction Summit, Istanbul, Turkey</i>	11/11/14
<i>Reading Intentions: Proactive and Predictive Multimodal Intelligent Interfaces</i> <i>Computer Laboratory, University of Cambridge, Cambridge, UK</i>	31/10/14
<i>Intelligent User Interfaces: Practical Considerations in Design and Implementation</i> <i>Muscle International Workshop on Computational Intelligence for Multimedia Understanding, Antalya, Turkey</i>	04/09/13
<i>Intelligent User Interfaces: Natural Interaction for Everyone</i> <i>Imagination Studios, Uppsala, Sweden</i>	05/08/13
<i>Intelligent User Interfaces: Mice Transformed back into Homo Sapiens</i> <i>Boğaziçi University, Istanbul</i>	04/12/12
<i>KU IUI Laboratory, Introduction and Ideas for Extension</i> <i>ASC-Inclusion EU FP10 Project, Extension Meeting, Cambridge, UK.</i>	25/11/12
<i>Panelist: Future of Intelligent User Interfaces: Issues and Challenges</i> <i>CHIST-ERA 2012, ERA-Net conference, Edinburgh, UK.</i>	05/07/12
<i>Keynote: Intelligent Interaction, Recognition and Multimodal Fusion: the Cases for Sketching, Gestures, Speech, Haptics, Eye-gaze and Affect</i> <i>CHIST-ERA 2012, ERA-Net conference, Edinburgh, UK.</i>	05/07/12
<i>Academia Panel, CSW 2012</i>	28/04/12
<i>Academia 101</i> <i>Koç University ACM Chapter</i>	25/11/11

<i>Feature Extraction and Classifier Combination for Image-based Sketch Recognition</i> Sabanci University, Istanbul, Turkey	6/04/11
<i>Intelligent User Interfaces Research Overview</i> Intelligent Interactive Systems Lab, Harvard University, USA	07/13/10
<i>Building Sketch-Based Intelligent User Interfaces</i> University of Nottingham, UK	06/29/10
<i>Overview of Recent Work in Pen-Centric Computing</i> Design Rationale Group, MIT, Cambridge MA	04/11/09
<i>Deep Green Related Work on Sketch Recognition</i> Texas A&M University, College Station, TX	25/04/09
<i>Intelligent User Interfaces for Natural Human Computer Interaction</i> Sabanci University, Istanbul, Turkey	12/03/09
<i>Sketch Recognition with Multiscale Stochastic Models of Temporal Patterns</i> Texas A&M University, College Station, TX	09/05/08
<i>Emerging Trends in Intelligent Interfaces and Implications for e-Commerce</i> University of Nottingham, Nottingham, UK	29/04/08
<i>Temporal Sketch Recognition and Sketch Based Interfaces</i> Enterface 2007 Workshop, Boğaziçi University, Istanbul	25/07/07
<i>Temporal Sketch Recognition and Sketch Based Interfaces</i> University of Bath, Bath, UK	18/05/07
<i>Affective Interfaces</i> University of Salford, Manchester, UK	28/11/06
<i>Overview of Recent Work in Pen-Centric Computing</i> Invited Workshop on Pen-Centric Computing, Providence RI	26/03/06
<i>Sketch Recognition Using Dynamic Bayesian Networks</i> University of New Mexico, Albuquerque NM	09/03/06

WORKSHOPS and TUTORIALS

<i>CVPR 2nd Workshop on Sketch-Oriented Deep Learning (SketchDL)</i>	06/20/22
<i>CVPR 1st Workshop on Sketch-Oriented Deep Learning (SketchDL)</i>	06/19/21
<i>Intelligent User Interfaces, Fethiye, Turkey</i> Invited tutorial on intelligent user interfaces delivered at the 20 th IEEE Signal Processing and Communication Conference.	04/18/12
<i>Building Sketch-Based Intelligent User Interfaces, University of Nottingham, UK</i> Invited one-day tutorial covering machine learning, human computer interfaces, evaluation strategies, the design, construction, evaluation of sketch-based intelligent user interfaces	06/29/10
<i>Annual Oxygen Alliance Partnership Meeting, MIT CSAIL, Cambridge MA</i> Co-organization of a day workshop for industry professionals from Project Oxygen partners, focusing on the essentials of building sketch based applications for PDAs and Tablet PCs from ground up.	04/24/02

WORK EXPERIENCE

<i>Computer Software Engineer at Havelsan Aerospace Electronic Industry Inc. Ankara, Turkey</i>	<i>06/99 – 09/99</i>
<i>Research Intern at ASELSAN Electronics. Ankara, Turkey</i>	<i>06/98 – 07/98</i>
<i>Computer Software Developer. Syracuse University Physics Department, Syracuse NY</i>	<i>09/96 – 12/98</i>
<i>Computer Software Developer. BlackWatch Tech. Inc., Syracuse NY</i>	<i>08/96 – 05/98</i>

ORGANIZED SEMINAR SERIES

<i>Graduate Seminars, Department of Engineering, Koç University, Istanbul.</i>	<i>12/09 – 01/11</i>
<i>Rainbow Group Thursday Seminars, Computer Lab., University of Cambridge, Cambridge UK.</i>	<i>01/08 – 04/08</i>
<i>Dangerous Ideas Seminar Series, MIT CSAIL, Cambridge MA.</i>	<i>06/04 – 06/06</i>

EXHIBITIONS & FAIRS

<i>Predicting User Intention in Sytlus Use TechInnovation Fair Marina Bay Sands, Singapore</i>	<i>October 2014</i>
<i>Pen-Based Interfaces for Teaching and Learning Turk Telekom R&D Days Sapanca, Turkey</i>	<i>September 2012</i>
<i>Mind-Reading Machines IIT Techfest IIT, Bombay, India</i>	<i>January 2007</i>
<i>Mind-Reading Machines The Royal Society Summer Science Exhibition The Royal Society, London, UK</i>	<i>June 2006</i>
<i>Mind-Reading Machines The Royal Society Summer Science Exhibition Glasgow Science Center, Glasgow, UK</i>	<i>September 2006</i>
<i>Thrill Laboratory, Mind-Reading Machines The Dana Center, London UK</i>	<i>October 2006</i>

PRESS COVERAGE

Hurriyet <i>Jun 2018</i>	<i>Intentions Inferred by Artificial Intelligence</i>
QUARTZ <i>Jan 2018</i>	<i>It's Time to Teach Kids How to Read Charts</i>
Turkishtime <i>Jan 2018</i>	<i>The Impact of Artificial Intelligence in Business</i>
INFOMAG <i>Jan 2011</i>	<i>Digital Turks</i>
PC World <i>October 2003</i>	<i>Microsoft Looks in the Crystal Ball: Research Chief Demonstrates Magic Paper, Virtual Classrooms, and Other Projects</i>
CNN <i>October 2003</i>	<i>Breathing Life into Messy Sketches</i>
New Scientist <i>September 2003</i>	<i>Smart Software Makes Sense of Rough Sketches</i>
Mass HighTech <i>July 2003</i>	<i>MIT's Tablet Tech Gets a Look-See from Microsoft</i>