

# Prof. Tolga Kurtuluř Çapın

## Personal Information

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## International Researcher IDs

ScholarID: BMVSN\_YAAAAJ

ORCID: 0000-0002-7843-6336

Publons / Web Of Science ResearcherID: G-6172-2018

ScopusID: 6603846240

Yoksis Researcher ID: 206103

## Biography

Tolga K. Çapın received his B.S. and M.S. degrees in Computer Engineering from Bilkent University in 1991 and 1993, and Ph.D. degree in Computer Sciences from Ecole Polytechnique Federale de Lausanne (EPFL) in 1998. Before joining TED University Computer Engineering Department, he worked at Nokia Research Center U.S.A. and worked on various projects related to the fields of mobile graphics, mobile interaction and augmented reality between 2000-2006. He worked as a member of staff at Computer Engineering Department of Bilkent University between 2006-2014. He has been the coordinator of the FP7 3DPHONE project and the principal investigator for several TÜBİTAK research projects. He received a service award from ISO for his contributions to the ISO-MPEG standard between 1991-1998. In 2014, he received an "Outstanding Specification Lead" award for his contribution to mobile Java standards. He served as a member of Advisory Group of TÜBİTAK TEYDEB BİLTEG.

Currently he is a member of the Advisory Group of TÜBİTAK UIDB, an associate editor of The Visual Computer Journal published by Springer. He has 8 U.S.A. patents, 3 international patents and more than 60 journal articles and conference papers in the fields of computer graphics and human-computer interaction.

## Education Information

Doctorate, Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland 1994 - 1998

Postgraduate, Ihsan Dogramaci Bilkent University, Turkey 1991 - 1993

Undergraduate, Ihsan Dogramaci Bilkent University, Turkey 1987 - 1991

## Foreign Languages

French

English

Turkish

## Research Areas

Computer Graphics, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition

## Academic Titles / Tasks

Professor, TED University, Faculty of Engineering, Department of Computer Engineering, 2017 - Continues

Associate Professor, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2014 - 2017

Assistant Professor, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Computer Engineering, 2006 - 2014

## Academic and Administrative Experience

Member of the Senate, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2022 - Continues

Erasmus Program Department Coordinator, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2021 - Continues

Engineering Faculty Administrative Committee (FYK), TED University, Faculty Of Engineering, Department Of Computer Engineering, 2019 - Continues

Fakülte Kurulu Üyesi, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2019 - Continues

University Administrative Committee (ÜYK), TED University, Faculty Of Engineering, Department Of Computer Engineering, 2019 - Continues

Stratejik Plan Tema Grubu Başkanı, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2022 - 2022

Head of Department, TED University, Faculty Of Engineering, Department Of Computer Engineering, 2014 - 2021

Education Faculty Management Committee (FYK), TED University, Faculty Of Education, 2019 - 2020

## Courses

Data Structures and Algorithms II, Undergraduate, 2021 - 2022

Computer Graphics, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2019 - 2020, 2017 - 2018

Data Structures and Algorithms II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Data Structures and Algorithms I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Data Structures and Algorithms I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Computer Graphics, Postgraduate, 2022 - 2023, 2021 - 2022

Summer Practice I, Undergraduate, 2022 - 2023

Summer Practice II, Undergraduate, 2022 - 2023

Introduction to Research in Computer Eng, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Human Computer Interaction, Undergraduate, 2020 - 2021

Human-Computer Interaction, Postgraduate, 2020 - 2021, 2018 - 2019

Fundamentals of Programming I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Senior Project II, Undergraduate, 2018 - 2019, 2017 - 2018

Senior Project I, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016

Data Structures and Algorithms II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Data Structures and Algorithms II, Undergraduate, 2017 - 2018

Data Structures and Algorithms I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Pre-Thesis Seminar, Postgraduate, 2017 - 2018

Data Structures and Algorithms I, Undergraduate, 2016 - 2017

Senior Project II, Undergraduate, 2016 - 2017

Discrete Structures of Mathematics, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Senior Project I, Undergraduate, 2016 - 2017  
Fundamentals of Programming I, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Human-Computer Interaction, Postgraduate, 2016 - 2017  
Introduction to Information Technologies, Undergraduate, 2015 - 2016  
Software Engineering, Undergraduate, 2014 - 2015

## Jury Memberships

Award, Mustafa N. Parlar Araştırma Teşvik Ödülü, ODTÜ MUSTAFA N. PARLAR VAKFI, December, 2022  
Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul ÜAK, December, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, November, 2022  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, November, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, November, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, November, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, November, 2022  
Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Orta Doğu Teknik Üniversitesi, October, 2022  
Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2022  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, June, 2022  
Doctoral Examination, Doctoral Examination, Ankara Yıldırım Beyazıt Üniversitesi, June, 2022  
Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul ÜAK, June, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, May, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, May, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, May, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, May, 2022  
Doctoral Examination, Doctoral Examination, Hacettepe Üniversitesi, May, 2022  
Post Graduate, Post Graduate, Ankara Yıldırım Beyazıt Üniversitesi, May, 2022  
Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, May, 2022  
Post Graduate, Post Graduate, Ankara Yıldırım Beyazıt Üniversitesi, February, 2022  
Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul ÜAK, February, 2022  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Hacettepe Üniversitesi, January, 2022  
August, 2021  
May, 2021  
May, 2021  
April, 2021  
April, 2021  
April, 2021  
April, 2021  
Moderator, TÜBİTAK, March, 2021  
December, 2020  
November, 2020  
October, 2020  
October, 2020  
July, 2020  
July, 2020  
Member of Competition Jury, February, 2020

January, 2020  
September, 2019  
September, 2019  
August, 2019  
July, 2019  
May, 2019  
May, 2019  
May, 2019

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

- I. **Gaze-contingent adaptation of VR stereo parameters for cybersickness prevention**  
Terzioğlu B., ÇELİKCAN U., Çapın T. K.  
Visual Computer, vol.40, no.7, pp.5017-5028, 2024 (SCI-Expanded)
- II. **Gaze-directed and saliency-guided approaches of stereo camera control in interactive virtual reality**  
Cebeci B., Askin M. B., Çapın T. K., ÇELİKCAN U.  
Computers and Graphics (Pergamon), vol.118, pp.23-32, 2024 (SCI-Expanded)
- III. **Task-Based Visual Attention for Continually Improving the Performance of Autonomous Game Agents**  
Ulu E., Çapın T. K., Çelikkale B., ÇELİKCAN U.  
Electronics (Switzerland), vol.12, no.21, 2023 (SCI-Expanded)
- IV. **Enhancing VR experience with RBF interpolation based dynamic tuning of stereoscopic rendering**  
Avan E., Çapın T. K., GÜRÇAY H., ÇELİKCAN U.  
COMPUTERS & GRAPHICS-UK, vol.102, pp.390-401, 2022 (SCI-Expanded)
- V. **Deep into visual saliency for immersive VR environments rendered in real-time**  
ÇELİKCAN U., Askin M. B., Albayrak D., Çapın T. K.  
COMPUTERS & GRAPHICS-UK, vol.88, pp.70-82, 2020 (SCI-Expanded)
- VI. **A machine learning framework for full-reference 3D shape quality assessment**  
Yildiz Z. C., Oztireli A. C., Çapın T. K.  
VISUAL COMPUTER, vol.36, no.1, pp.127-139, 2020 (SCI-Expanded)
- VII. **A comprehensive study of the affective and physiological responses induced by dynamic virtual reality environments**  
Cebeci B., ÇELİKCAN U., Çapın T. K.  
COMPUTER ANIMATION AND VIRTUAL WORLDS, vol.30, no.3-4, 2019 (SCI-Expanded)
- VIII. **Style-based biped walking control**  
Kavafoglu Z., Kavafoglu E., Cimen G., Çapın T. K., GÜRÇAY H.  
VISUAL COMPUTER, vol.34, no.3, pp.359-375, 2018 (SCI-Expanded)
- IX. **A perceptual quality metric for dynamic triangle meshes**  
Yildiz Z. C., Çapın T. K.  
EURASIP JOURNAL ON IMAGE AND VIDEO PROCESSING, vol.2017, 2017 (SCI-Expanded)
- X. **Image reproduction with compensation of luminance adaptation**  
ÇELİKCAN U., Arpa S., Çapın T. K.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.11, no.1, pp.155-162, 2017 (SCI-Expanded)
- XI. **Skill learning based catching motion control**  
Cimen G., Kavafoglu Z., Kavafoglu E., Çapın T. K., GÜRÇAY H.  
COMPUTER ANIMATION AND VIRTUAL WORLDS, vol.26, no.3-4, pp.217-225, 2015 (SCI-Expanded)
- XII. **Purkinje Images: Conveying Different Content for Different Luminance Adaptations in a Single Image**  
Arpa S., Ritschel T., Myszkowski K., Çapın T. K., Seidel H.  
COMPUTER GRAPHICS FORUM, vol.34, no.1, pp.116-126, 2015 (SCI-Expanded)
- XIII. **Example-Based Retargeting of Human Motion to Arbitrary Mesh Models**

- ÇELİKCAN U., Yaz I. O., Çapın T. K.  
COMPUTER GRAPHICS FORUM, vol.34, no.1, pp.216-227, 2015 (SCI-Expanded)
- XIV. **A clustering-based method to estimate saliency in 3D animated meshes**  
BÜLBÜL M. A., Arpa S., Çapın T. K.  
COMPUTERS & GRAPHICS-UK, vol.43, pp.11-20, 2014 (SCI-Expanded)
- XV. **Enhanced user performance in an image gallery application with a mobile autostereoscopic touch display**  
Sassi A., Pöyhönen P., Jakonen S., Suomi S., Çapın T. K., Häkkinen J.  
Displays, vol.35, no.3, pp.152-158, 2014 (SCI-Expanded)
- XVI. **A framework for applying the principles of depth perception to information visualization**  
Zeynep C. Y., Bulbul A., Çapın T. K.  
ACM Transactions on Applied Perception, vol.10, no.4, 2013 (SCI-Expanded)
- XVII. **Dual-finger 3D interaction techniques for mobile devices**  
Telkenaroglu C., Çapın T. K.  
Personal and Ubiquitous Computing, vol.17, no.7, pp.1551-1572, 2013 (SCI-Expanded)
- XVIII. **Editorial**  
Thalman D., Çapın T. K., Balcisoy S.  
Computer Animation and Virtual Worlds, vol.24, no.3-4, pp.153-154, 2013 (SCI-Expanded)
- XIX. **Classification of human motion based on affective state descriptors**  
Cimen G., İLHAN H., Çapın T. K., GÜRÇAY H.  
Computer Animation and Virtual Worlds, vol.24, no.3-4, pp.355-363, 2013 (SCI-Expanded)
- XX. **Attention-aware disparity control in interactive environments**  
ÇELİKCAN U., Cimen G., Kevinc E. B., Çapın T. K.  
Visual Computer, vol.29, no.6-8, pp.685-694, 2013 (SCI-Expanded)
- XXI. **Perceptual 3D rendering based on principles of analytical cubism**  
Arpa S., Bulbul A., Çapın T. K., Ozguc B.  
Computers and Graphics (Pergamon), vol.36, no.8, pp.991-1004, 2012 (SCI-Expanded)
- XXII. **Multiscale motion saliency for keyframe extraction from motion capture sequences**  
Halit C., Çapın T. K.  
Computer Animation and Virtual Worlds, vol.22, no.1, pp.3-14, 2011 (SCI-Expanded)
- XXIII. **Three-dimensional media for mobile devices**  
Gotchev A., AKAR G., Çapın T. K., Strohmeier D., Boev A.  
Proceedings of the IEEE, vol.99, no.4, pp.708-741, 2011 (SCI-Expanded)
- XXIV. **Assessing visual quality of 3-D polygonal models**  
Bulbul A., Çapın T. K., Lavoue G., Preda M.  
IEEE Signal Processing Magazine, vol.28, no.6, pp.80-90, 2011 (SCI-Expanded)
- XXV. **A color-based face tracking algorithm for enhancing interaction with mobile devices**  
Bulbul A., Cipiloglu Z., Çapın T. K.  
Visual Computer, vol.26, no.5, pp.311-323, 2010 (SCI-Expanded)
- XXVI. **A perceptual approach for stereoscopic rendering optimization**  
Bulbul A., Cipiloglu Z., Çapın T. K.  
Computers and Graphics (Pergamon), vol.34, no.2, pp.145-157, 2010 (SCI-Expanded)
- XXVII. **The state of the art in mobile graphics research**  
Çapın T. K., Pulli K., Akenine-Möller T.  
IEEE Computer Graphics and Applications, vol.28, no.4, pp.74-84, 2008 (SCI-Expanded)
- XXVIII. **Visual Computer: Editorial**  
Çapın T. K., Balcisoy S., Thalman D., Magnenat-Thalman N., Chua T.  
Visual Computer, vol.24, no.7-9, pp.463, 2008 (SCI-Expanded)
- XXIX. **3D Hair sketching for real-time dynamic & key frame animations**  
Aras R., Başarankut B., Çapın T. K., Özgüç B.  
Visual Computer, vol.24, no.7-9, pp.577-585, 2008 (SCI-Expanded)

- XXX. **Simulating virtual humans in networked virtual environments**  
Pandzic I, Babski C., Çapın T. K., Lee W., Magnenat-Thalmann N., Musse S. R., Mocozet L., Seo H., Thalmann D.  
Presence: Teleoperators and Virtual Environments, vol.10, no.6, pp.632-646, 2001 (SCI-Expanded)
- XXXI. **A dead-reckoning technique for streaming virtual human animation**  
Çapın T. K., Esmerado J., Thalmann D.  
IEEE Transactions on Circuits and Systems for Video Technology, vol.9, no.3, pp.411-414, 1999 (SCI-Expanded)
- XXXII. **Anyone for tennis?**  
Molet T., Aubel A., Çapın T. K., Carion S., Lee E., Magnenat-Thalmann N., Noser H., Pandzic I., Sannier G., Thalmann D.  
Presence: Teleoperators and Virtual Environments, vol.8, no.2, pp.140-156, 1999 (SCI-Expanded)
- XXXIII. **Virtual human representation and communication in VLNet**  
Çapın T. K., Noser H., Thalmann D., Pandzic I. S., Thalmann N. M.  
IEEE Computer Graphics and Applications, vol.17, no.2, pp.42-53, 1997 (SCI-Expanded)
- XXXIV. **Virtual life network: A body-centered networked virtual environment**  
Pandzic I., Thalmann N. M., Çapın T. K., Thalmann D.  
Presence: Teleoperators and Virtual Environments, vol.6, no.6, pp.676-686, 1997 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Gaze-Directed and Saliency-Guided Methods of Stereoscopic Camera Control for Real-Time Enhancement of Interactive VR**  
Cebeci B., Aşkın M. B., Çelikcan U., Çapın T. K.  
2021
- II. **Nonverbal communication interface for collaborative virtual environments**  
Guye-Vuillème A., Çapın T. K., Pandzic I., Magnenat Thalmann N., Thalmann D.  
Virtual Reality, vol.4, no.1, pp.49-59, 1999 (Scopus)
- III. **A flexible architecture for virtual humans in networked collaborative virtual environments**  
Pandzic I. S., Çapın T. K., Lee E., Thalmann N. M., Thalmann D.  
Computer Graphics Forum, vol.16, no.3, 1997 (Scopus)
- IV. **MPEG-4: Audio/video and synthetic graphics/audio for mixed media**  
Doenges P. K., Çapın T. K., Lavagetto F., Ostermann J., Pandzic I. S., Petajan E. D.  
Signal Processing: Image Communication, vol.9, no.4, pp.433-463, 1997 (Scopus)
- V. **A parallel progressive radiosity algorithm based on patch data circulation**  
Aykanat C., Çapın T. K., Özgüç B.  
Computers and Graphics (Pergamon), vol.20, no.2, pp.307-324, 1996 (Scopus)
- VI. **The HUMANOID Environment for Interactive Animation of Multiple Deformable Human Characters**  
Boulic R., Çapın T. K., Huang Z., Kalra P., Lintermann B., Magnenat-Thalmann N., Mocozet L., Molet T., Pandzic I., Saar K., et al.  
Computer Graphics Forum, vol.14, no.3, pp.337-348, 1995 (Scopus)

## Books & Book Chapters

- I. **Modeling Human Perception of 3D Scenes**  
Çapın T. K., Yıldız Z. Ç., Bülbül A.  
in: Intelligent Scene Modeling and Human-Computer Interaction, , Editor, Springer, 2021
- II. **Simple vertical human climbing control with end effector state machines**  
Kavafoğlu Z., İlhan H., Kavafoğlu E., Gurcay H., Çapın T. K.  
in: Contemporary Topics in Computer Graphics and Games, , Editor, pp.381-401, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Modeling Human Perception in Computer Graphics**  
Çapın T. K.
- II. **A Fully Object-space Approach for Full-reference Visual Quality Assessment of Static and Animated 3D Meshes**  
Yildiz Z. C., Çapın T. K.  
14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (GRAPP), Prague, Czech Republic, 25 - 27 February 2019, pp.169-176
- III. **Visual Saliency Prediction in Dynamic Virtual Reality Environments Experienced with Head-Mounted Displays: an Exploratory Study**  
Albayrak D., Askin M. B., Çapın T. K., ÇELİKCAN U.  
18th International Conference on Cyberworlds (CW), Kyoto, Japan, 2 - 04 October 2019, pp.61-68
- IV. **Paper and pen: A 3D sketching system**  
Yildiz C., Çapın T. K.  
27th International Symposium on Computer and Information Sciences, ISCIS 2012, Paris, France, 3 - 04 October 2012, pp.191-199
- V. **Perceptual caricaturization of 3D models**  
Cimen G., Bulbul A., Ozguc B., Çapın T. K.  
27th International Symposium on Computer and Information Sciences, ISCIS 2012, Paris, France, 3 - 04 October 2012, pp.201-207
- VI. **A decision theoretic approach to motion saliency in computer animations**  
Arpa S., Bulbul A., Çapın T. K.  
4th International Conference on Motion in Games, MIG 2011, Edinburgh, England, 13 - 15 November 2011, vol.7060 LNCS, pp.168-179
- VII. **Saliency for animated meshes with material properties**  
Bulbul A., Koca C., Çapın T. K., Güdükbay U.  
7th Annual Symposium on Applied Perception in Graphics and Visualization, APGV 2010, Los Angeles, CA, United States Of America, 23 - 24 July 2010, pp.81-88
- VIII. **A framework for enhancing depth perception in computer graphics**  
Cipiloglu Z., Bulbul A., Çapın T. K.  
7th Annual Symposium on Applied Perception in Graphics and Visualization, APGV 2010, Los Angeles, CA, United States Of America, 23 - 24 July 2010, pp.141-148
- IX. **A face tracking algorithm for user interaction in mobile devices**  
Bulbul A., Cipiloglu Z., Çapın T. K.  
2009 International Conference on CyberWorlds, CW '09, Bradford, England, 7 - 11 September 2009, pp.385-390
- X. **3D thumbnails for mobile media browser interface with autostereoscopic displays**  
Gundogdu R. B., Yigit Y., Çapın T. K.  
16th International Multimedia Modeling Conference on Advances in Multimedia Modeling, MMM 2010, Chongqing, China, 6 - 08 October 2010, vol.5916 LNCS, pp.626-636
- XI. **Editing heightfield using history management and 3D widgets**  
Yalcin M. A., Çapın T. K.  
2009 24th International Symposium on Computer and Information Sciences, ISCIS 2009, Guzelyurt, Cyprus (Gkry), 14 - 16 September 2009, pp.442-447
- XII. **Simulation of water drops on a surface**  
Algan E., Kabak M., Ozguc B., Çapın T. K.  
2008 3DTV-Conference: The True Vision - Capture, Transmission and Display of 3D Video, 3DTV-CON 2008, İstanbul, Turkey, 28 - 30 May 2008, pp.361-364
- XIII. **A unified graphics rendering pipeline for autostereoscopic rendering**  
Kalaiah A., Çapın T. K.  
1st International Conference on 3DTV, 3DTV-CON 2007, Kos, Greece, 7 - 09 May 2007

- XIV. **More: A mobile open rich media environment**  
Setlur V., Çapın T. K., Chitturi S., Vedantham R., Ingrassia M.  
2006 IEEE International Conference on Multimedia and Expo, ICME 2006, Toronto, Canada, 9 - 12 July 2006, vol.2006, pp.2029-2032
- XV. **Camera-based virtual environment interaction on mobile devices**  
Çapın T. K., Haro A., Setlur V., Wilkinson S.  
ISCIS 2006: 21th International Symposium on Computer and Information Sciences, İstanbul, Turkey, 1 - 03 November 2006, vol.4263 LNCS, pp.765-773
- XVI. **Mobile camera-based adaptive viewing**  
Haro A., Mori K., Setlur V., Çapın T. K.  
4th International Conference on Mobile and Ubiquitous Multimedia, MUM '05, Christchurch, New Zealand, 8 - 10 December 2005, vol.154, pp.78-83
- XVII. **Mobile camera-based user interaction**  
Haro A., Mori K., Çapın T. K., Wilkinson S.  
ICCV 2005 Workshop on HCI - Computer Vision in Human-Computer Interaction, Beijing, China, 21 October 2005, vol.3766 LNCS, pp.79-89
- XVIII. **JSR-226: A versatile API for mobile SVG on J2ME**  
Çapın T. K., Chitturi S., Hardy V.  
ACM SIGGRAPH 2004: Web Graphics, SIGGRAPH'04, Los Angeles, CA, United States Of America, 8 - 12 August 2004, pp.11
- XIX. **Efficient modeling of virtual humans in MPEG-4**  
Çapın T. K., Petajan E., Ostermann J.  
2000 IEEE International Conference on Multimedia and Expo (ICME 2000), New York, United States Of America, 30 July - 02 August 2000, pp.1103-1106
- XX. **Very low bitrate coding of virtual human animation in MPEG-4**  
Çapın T. K., Petajan E., Ostermann J.  
2000 IEEE International Conference on Multimedia and Expo (ICME 2000), New York, United States Of America, 30 July - 02 August 2000, pp.1107-1110
- XXI. **Efficient modeling of virtual humans in MBEG-4**  
Capin T. K., Petajan E., Osterman J.  
2000 IEEE INTERNATIONAL CONFERENCE ON MULTIMEDIA AND EXPO, PROCEEDINGS VOLS I-III, pp.1103-1106
- XXII. **Integration of avatars and autonomous Virtual Humans in Networked Virtual Environments**  
Capin T. K., Pandzic I., Thalmann N., Thalmann D.  
ADVANCES IN COMPUTER AND INFORMATION SCIENCES '98, vol.53, pp.326-333
- XXIII. **Autonomous actors in networked collaborative virtual environments**  
Pandzic I. S., Çapın T. K., Lee E., Thalmann N. M., Thalmann D.  
1998 MultiMedia Modeling Conference, MMM 1998, Lausanne, Switzerland, 12 - 15 October 1998, pp.138-145
- XXIV. **Crowd modelling in Collaborative Virtual Environments**  
Musse S. R., Babski C., Çapın T. K., Thalmann D.  
ACM Symposium on Virtual Reality Software and Technology, VRST 1998, Taipei, Taiwan, 2 - 05 November 1998, pp.115-124
- XXV. **Efficient network transmission of virtual human bodies**  
Çapın T. K., Jovovic M., Esmerado J., Aubel A., Thalmann D.  
1998 Computer Animation, CA 1998, Pennsylvania, United States Of America, 8 - 10 June 1998, pp.41-48
- XXVI. **Versatile navigation interface for virtual humans in collaborative virtual environments**  
Pandzic I., Çapın T. K., Magnenat-Thalmann N., Thalmann D.  
Proceedings of the 1997 ACM Symposium on Virtual Reality Software and Technology, VRST, Lausanne, Switzerland, 15 - 17 September 1997, pp.45-49
- XXVII. **A dead-reckoning algorithm for virtual human figures**  
Capin T. K., Pandzic I., Thalmann N., Thalmann D.  
IEEE 1997 VIRTUAL REALITY ANNUAL INTERNATIONAL SYMPOSIUM, PROCEEDINGS, pp.161-169



**XXVIII. Dead-reckoning algorithm for virtual human figures**

Çapın T. K., Pandzic I. S., Thalmann N. M., Thalmann D.

Proceedings of the 1997 IEEE Virtual Reality Annual International Symposium, Albuquerque, NM, USA, 1 - 05 March 1997, pp.161-169

**XXIX. MPEG-4 for networked collaborative virtual environments**

Pandzic I., Çapın T. K., Magnenat-Thalmann N., Thalmann D.

Proceedings of the 1997 3rd Annual Conference on Virtual Systems and Multimedia, VSMM'97, Geneva, Switz, 10 - 12 September 1997, pp.19-25

**XXX. Progressive refinement radiosity on ring-connected multicomputers**

Çapın T. K., Aykanat C., Ozguc B.

Proceedings of the 1993 Parallel Rendering Symposium, San-Jose, Costa Rica, 25 - 26 October 1993, pp.71-76

## Activities in Scientific Journals

VIRTUAL REALITY & INTELLIGENT HARDWARE, Assistant Editor/Section Editor, 2021 - Continues

VISUAL COMPUTER, Assistant Editor/Section Editor, 2014 - Continues

## Memberships / Tasks in Scientific Organizations

TÜBİTAK UIDB Ağlara Destek Programı, Member of Advisory Board, 2021 - Continues, Turkey

TÜBİTAK UIDB Koordinatörlüğü Destek Programı, Member of Advisory Board, 2021 - Continues, Turkey

Association for Computing Machinery (ACM), Member, 2014 - Continues, Turkey

## Scientific Refereeing

ACM CHI (Human Factors in Computing Systems) 2023 conference, Conference Paper (Full Text), December 2022

TUBİTAK Project, TUBİTAK Horizon Coordination Support Program, Uluslararası İşbirliği Daire Başkanlığı, Turkey, December 2022

TUBİTAK Project, TUBİTAK Horizon Coordination Support Program, Uluslararası İşbirliği Daire Başkanlığı, Turkey, December 2022

TUBİTAK Project, 1002 - Quick Support Program, Hacettepe Üniversitesi, Turkey, December 2022

TUBİTAK Project, 1501 - Industry R & D Projects Support Program, AUTODİACTİC TECHNOLOGİES YAZILIM MÜHENDİSLİK ENERJİ SAN. VE TİC.LTD.ŞTİ., Turkey, December 2022

TUBİTAK Project, 1002 - Quick Support Program, Ondokuz Mayıs Üniversitesi, Turkey, December 2022

TUBİTAK Project, 1512 - Progressive Support Program for Entrepreneurship, VIRTUAL TRY ARAŞTIRMA GELİŞTİRME VE BİLİŞİM SANAYİ ANONİM ŞİRKETİ, Turkey, November 2022

TUBİTAK Project, 1501 - Industry R & D Projects Support Program, EYWİN BİLGİ TEKNOLOJİLERİ ANONİM ŞİRKETİ, Turkey, November 2022

TUBİTAK Project, 1002 - Quick Support Program, Kadir Has Üniversitesi, Turkey, November 2022

TUBİTAK Project, 1512 - Progressive Support Program for Entrepreneurship, TÜBİTAK Bireysel Genç Girişim Desteği, Turkey, October 2022

TUBİTAK Project, 1505 - University-Industry Cooperation Support Program, Fırat Üniversitesi, Turkey, October 2022

TUBİTAK Project, 1505 - University-Industry Cooperation Support Program, Çankaya Üniversitesi, Turkey, October 2022

TUBİTAK Project, 1512 - Progressive Support Program for Entrepreneurship, TÜBİTAK Bireysel Genç Girişim Desteği, Turkey, October 2022

TUBİTAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, UĞUR OPTİK TURİZM MAKİNA YAZILIM MEDİKAL SANAYİ VE TİCARET LTD. ŞTİ. (ANTALYA), Turkey, October 2022

ASYU 2022 – Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Conference Paper (Full Text), July 2022

VISUAL COMPUTER, Journal Indexed in SCI-E, July 2022

TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, TAV BİLİŞİM HİZMETLERİ A.Ş. (İSTANBUL), Turkey, July 2022

TUBITAK Project, 1002 - Quick Support Program, Kadir Has Üniversitesi, Turkey, July 2022

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, MONNOM TASARIM YAZILIM DANIŞMANLIK ANONİM ŞİRKETİ, Turkey, July 2022

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, TÜBİTAK Bireysel Genç Girişim Desteği, Turkey, June 2022

TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, Sakarya Uygulamalı Bilimler Üniversitesi, Turkey, June 2022

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, Bireysel Genç Girişim Desteği, Turkey, June 2022

TUBITAK Project, 1501 - Industry R & D Projects Support Program, PUYOL MÜHENDİSLİK MÜŞAVİRLİK LİMİTED ŞİRKETİ (ANKARA), Turkey, June 2022

COMPUTER ANIMATION AND VIRTUAL WORLDS, Journal Indexed in SCI-E, May 2022

TUBITAK Project, 1501 - Industry R & D Projects Support Program, MOTİON BLUR YAZILIM AŞ., Turkey, May 2022

COMPUTER ANIMATION AND VIRTUAL WORLDS, Journal Indexed in SCI-E, April 2022

COMPUTER ANIMATION AND VIRTUAL WORLDS, Journal Indexed in SCI-E, April 2022

COMPUTER ANIMATION AND VIRTUAL WORLDS, Journal Indexed in SCI-E, April 2022

COMPUTER ANIMATION AND VIRTUAL WORLDS, Journal Indexed in SCI-E, April 2022

VISUAL COMPUTER, Journal Indexed in SCI-E, April 2022

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TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Harran Üniversitesi, Turkey, April 2022

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Fırat Üniversitesi, Turkey, April 2022

TUBITAK Project, 1511 - TUBITAK Priority Fields Research Technology Development and Innovation PDP, CORNEA HAVACILIK SİSTEMLERİ SAN. VE TİC. A.Ş., Turkey, April 2022

TUBITAK Project, 1002 - Quick Support Program, Gazi Üniversitesi, Turkey, April 2022

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Harran Üniversitesi, Turkey, April 2022

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Harran Üniversitesi, Turkey, April 2022

TUBITAK Project, 1002 - Quick Support Program, Hacettepe Üniversitesi, Turkey, April 2022

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Harran Üniversitesi, Turkey, April 2022

Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, National Scientific Refreed Journal, March 2022

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, TÜBİTAK Bireysel Genç Girişim Desteği, Turkey, March 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Fırat Üniversitesi, Turkey, March 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Antalya Bilim Üniversitesi, Turkey, March 2022

TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, NETAŞ TELEKOMÜNİKASYON A.Ş. (İSTANBUL), Turkey, March 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Sakarya Uygulamalı Bilimler Üniversitesi, Turkey, March 2022

TUBITAK Project, 1505 - University-Industry Cooperation Support Program, Maltepe Üniversitesi, Turkey, March 2022

EMO Bilimsel Dergi, National Scientific Refreed Journal, February 2022

Project Supported by Higher Education Institutions, BAP Research Project, TED University, Turkey, January 2022  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, İzmir Katip Çelebi Üniversitesi, Turkey, January 2022  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Bartın Üniversitesi, Turkey, January 2022  
TUBITAK Project, 3501 - National Young Researcher Career Development Program, İstinye Üniversitesi, Turkey, January 2022  
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Muğla Sıtkı Koçman Üniversitesi, Turkey, January 2022  
TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, İNDEVO TEKNOLOJİ SANAYİ TİCARET LİMİTED ŞİRKETİ, Turkey, January 2022  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Erzurum Teknik Üniversitesi, Turkey, January 2022  
Virtual Reality and Intelligent Hardware, September 2021  
EMO Bilimsel Dergi, July 2021  
The Visual Computer, January 2021  
The Visual Computer - Paper 2020.6, August 2020  
The Visual Computer - Paper 2020.8, June 2020  
The Visual Computer - Paper 2020.7, May 2020  
The Visual Computer - Paper 2020.5, April 2020  
The Visual Computer - Paper 2020.3, April 2020  
The Visual Computer - Paper 2020.4, April 2020  
The Visual Computer - Paper 2020.2, January 2020  
The Visual Computer - Paper 2020.1, January 2020  
The Visual Computer, March 2019  
The Visual Computer, March 2019  
The Visual Computer, March 2019  
The Visual Computer, March 2019  
The Visual Computer, March 2019  
The Visual Computer, January 2019

## **Scientific Consultations**

WURI RANKING 2022, Other, TED University, Faculty Of Engineering, Department Of Computer Engineering, Turkey, 2022 - 2022

## **Tasks In Event Organizations**

Çapın T. K., Computer Animation and Social Agents Conference 2022, Scientific Congress, Nanjing, China, Temmuz 2022  
Çapın T. K., IEEE Virtual Reality Symposium 2022, Scientific Congress, Australia, Mart 2022  
ÇAPIN T. K., ISVC 2021 – International Symposium on Visual Computing, Ekim 2021  
ÇAPIN T. K., Computer Graphics International 2021, Eylül 2021  
ÇAPIN T. K., Eurasiagraphics 2020, Aralık 2020  
ÇAPIN T. K., Web3D 2020, Kasım 2020  
ÇAPIN T. K., Computer Graphics International 2020, Ekim 2020  
ÇAPIN T. K., Sinyal İşleme ve İletişim Uygulamaları (SİU) Kurultayı - 2020, Ekim 2020  
ÇAPIN T. K., ISVC 2020 - International Symposium on Visual Computing, Ekim 2020  
ÇAPIN T. K., UBMK 2020 - International Conference on Computer Science and Engineering, Eylül 2020  
ÇAPIN T. K., International Symposium on Visual Computing, Ekim 2019

ÇAPIN T. K., Organization Committee Member: Sinyal ve Görüntü İşleme Konferansı 2019, Ankara, Turkey, Ekim 2019  
ÇAPIN T. K., Sinyal ve Görüntü İşleme Konferansı, Ankara, Turkey, Ekim 2019  
ÇAPIN T. K., 4th International Conference on Computer Science and Engineering UBMK'19, Eylül 2019  
ÇAPIN T. K., 24th International ACM Conference on 3D Web Graphics and Interactive Technology (Web3D 2019), Los-Angeles, Chile, Temmuz 2019  
ÇAPIN T. K., 36th Annual Computer Graphics International Conference (CGI 2019), Haziran 2019  
ÇAPIN T. K., Sinyal İşleme ve İletişim Uygulamaları (SİU) Kurultayı, Nisan 2019