

# Necati Cihan Camgöz

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CONTACT INFORMATION	Centre for Vision, Speech and Signal Processing University of Surrey Guildford, Surrey, GU2 7XH, UK	<i>E-mail:</i> <a href="mailto:cihancamgoz@gmail.com">cihancamgoz@gmail.com</a> <i>Web:</i> <a href="http://www.cihancamgoz.com">www.cihancamgoz.com</a>
FIELDS OF INTERESTS	Computer Vision Deep Learning Sign Language Recognition	
EDUCATION	<b>University of Surrey</b> , PhD in Electronic Engineering, Guildford, UK Thesis: TBD Advisor: Prof. Dr. Richard Bowden and Dr. Simon Hadfield	<b>2016 – Present</b>
	<b>Boğaziçi University</b> , M.S. in Computer Engineering, İstanbul, Turkey GPA: 3.94 / 4.00 Thesis: Human Computer Interaction Platform for the Hearing Impaired Advisor: Prof. Dr. Lale Akarun	<b>2013 – 2016</b>
	<b>Yıldız Technical University</b> , B.S. in Computer Engineering, İstanbul, Turkey GPA: 3.79 / 4.00 Junior Project: Developing an Image Processing Library for ARM Cored Microprocessors Senior Project: An Intelligent Indoor Video Surveillance System: Gözüm Üstünde Advisor: Assoc. Prof. Dr. Ali Gökhan Yavuz	<b>2008 – 2013</b>
RESEARCH EXPERIENCE	<b>University of Surrey</b> , Guildford, UK <b>Centre for Vision Speech and Signal Processing (CVSSP)</b> , Research Student I am a member of the Cognitive Vision Group Group. My research interests are Sequence-to-Sequence Modelling, Deep Learning and Continuous Sign Language Recognition.	<b>July 2016 – Present</b>
	<b>Boğaziçi University</b> , İstanbul, Turkey <b>Perceptual Intelligence Laboratory (PILAB)</b> , Research Assistant I was a member of the Computer Vision and Image Processing Group. My research areas were Sign Language Recognition and Facial Landmark Localization.	<b>Dec. 2013 – June 2016</b>
	<b>Yıldız Technical University</b> , İstanbul, Turkey <b>Intelligent System Laboratories (ISL)</b> , Research Assistant (Undergraduate Level) I was a member of the Wireless Sensor Networks Group. My research areas were Wireless Multimedia Sensor Networks and Image Processing on Embedded Systems.	<b>June 2011 – Sept. 2013</b>
	<b>Lodz Technical University - Politechnika</b> , Lodz, Poland <b>Department of Applied Sciences</b> , IAESTE Summer Intern I developed algorithms to measure surface angles of different materials from images that were captured in high temperatures.	<b>June 2012 – Aug. 2012</b>
TEACHING EXPERIENCE	<b>University of Surrey</b> , Guildford, UK • EEE3013 – Object-Oriented Design and C++, Autumn 2017, Teaching Assistant	
	<b>Boğaziçi University</b> , İstanbul, Turkey • CmpE58Z – Introduction to Biometrics (Graduate Course), Spring 2016, Teaching Assistant • CmpE537 – Computer Vision (Graduate Course), Autumn 2015, Teaching Assistant • CmpE58Z – Introduction to Biometrics (Graduate Course), Spring 2015, Teaching Assistant	

PROFESSIONAL  
SERVICES

**Reviewer**

- IEEE Signal Processing Letters (SPL), 2017 – Present
- IEEE Pattern Analysis and Machine Intelligence (PAMI), 2017 – Present.
- IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2017.
- IEEE International Conference on Robotics and Automation (ICRA), 2017-2018.

**Local Committee and Volunteering**

- IEEE International Conference on Computer Vision (ICCV), 2017, Student Volunteer.
- IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2015, Student Volunteer.
- ACM International Conference on Multimodal Interaction (ICMI), 2014, Local Committee.

**Program Committee**

- IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2018, Program Committee.
- International Symposium on Image and Signal Processing and Analysis (ISPA), 2017, Technical Program Committee.
- IEEE International Conference on Computer Vision (ICCVW), 2015, ChaLearn Looking at People Workshop, Program Committee.
- IEEE Conference on Computer Vision And Pattern Recognition (CVPRW), 2015, ChaLearn Looking at People Workshop, Program Committee.

AWARDS

- 3<sup>rd</sup> Place – Continuous Gesture Recognition Challenge, 2<sup>nd</sup> Round in IEEE International Conference of Computer Vision (ICCV), ChaLearn Looking at People Workshop, October 2017.
- 2<sup>nd</sup> Place – Continuous Gesture Recognition Challenge in IEEE 23<sup>rd</sup> International Conference of Pattern Recognition (ICPR), ChaLearn Looking at People Workshop, December 2016.
- 7<sup>th</sup> Place among 17 Participants – Gesture Recognition Challenge in European Conference on Computer Vision (ECCV), ChaLearn Looking at People Workshop, June 2014.
- 1<sup>st</sup> Prize – The Scientific and Technological Research Council of Turkey (TUBITAK), Undergraduate Students Software Projects Competition (Program #2242), Embedded Systems Category, with the Project: Gözüüm Üstünde, June 2013.
- 1<sup>st</sup> Prize – Indra’s Future Minds Competition, 3<sup>rd</sup> Edition, Brazil, April 2013.

SCHOLARSHIPS

- Overseas Research Scholarship – University of Surrey, July 2016 – July 2019.
- PhD Scholarship – Swiss National Science Foundation (SNSF), July 2016 – July 2019.
- Thesis Student Scholarship – Republic of Turkey, Ministry of Science, Industry and Technology, Industrial Thesis Program (SANTEZ), Mar. 2014 – Feb. 2016.
- Masters Scholarship – Technological Research Council of Turkey (TUBITAK), Graduate Scholarship Program (Program #2210) (Discontinued after receiving Industrial Thesis Program Scholarship), Oct. 2013 – Oct. 2015.
- Open Business Software Solutions (OBSS), Senior Undergraduate Student Merit Scholarship, Sept. 2011 – Sept. 2012.

HONORS

- Awarded with the Fulbright Ph.D. Scholarship (for the Sept. 2015 – Sept. 2017 period), but not used. July 2014.
- Graduated with High Honors (Highest GPA among the Computer Engineering Graduates) - Yıldız Technical University, Computer Engineering Department. June 2013.

LANGUAGES

- Turkish – Native language.
- English – Speak fluently, read and write with high proficiency.
- German – Speak, read, and write with basic competence.
- Turkish Sign Language (TİD) – Self thought, basic knowledge of the language.
- British Sign Language (BSL) – Stage 1, studying towards Stage 2.

## THESIS

- T1. **Necati Cihan Camgöz**, *Human-Computer Interaction Platform for the Hearing Impaired in Healthcare and Finance Applications*, Master's Thesis, Boğaziçi University, 2016.

## JOURNAL PAPERS

- J1. M. Amaç Güvensan, A. Oğuz Kansız, **Necati Cihan Camgöz**, H. İrem Türkmen, A. Gökhan Yavuz, M. Elif Karsıgil, *An Energy-Efficient Multi-Tier Architecture for Fall Detection on Smartphones*, *Sensors*, Volume 17, Issue 7, 1487, 2017.

## CONFERENCE PROCEEDINGS

- C8. **Necati Cihan Camgöz**, Simon Hadfield, Oscar Koller, Richard Bowden, *SubUNets: End-to-end Hand Shape and Continuous Sign Language Recognition*, IEEE 16th International Conference on Computer Vision (ICCV), *Oral: Spotlight*, (22-29 October 2017).
- C7. **Necati Cihan Camgöz**, Ahmet Alp Kindiroğlu, Serpil Karabüklü, Meltem Kelepir, A. Sumru Özsoy, Lale Akarun, *BosphorusSign: A Turkish Sign Language Recognition Corpus in Health and Finance Domains*, 10th Edition of the Language Resources and Evaluation Conference (LREC), (23-28 May 2016).
- C6. Oğulcan Özdemir, **Necati Cihan Camgöz**, Lale Akarun, *Isolated Sign Language Recognition using Improved Dense Trajectories*, IEEE 24th Signal Processing and Communications Applications Conference (SIU), (16-19 May 2016). [In Turkish]
- C5. Muhammed Miraç Süzgün, Hilal Özdemir, **Necati Cihan Camgöz**, Ahmet Alp Kindiroğlu, Doğaç Başaran, Cengiz Togay, Lale Akarun, *Hospisign: An Interactive Sign Language Platform for Hearing Impaired*, International Conference on Computer Graphics, Animation and Gaming Technologies (Eurasia Graphics), (19-20 November 2015).
- C4. **Necati Cihan Camgöz**, Berk Gökberk, Lale Akarun, *Facial Landmark Localization in Depth Images using Supervised Descent Method*, IEEE 23rd Signal Processing and Communications Applications Conference (SIU), (16-19 May 2015). [In Turkish]
- C3. **Necati Cihan Camgöz**, Ahmet Alp Kindiroğlu, Lale Akarun, Oya Aran, *Domain Adaptation for Gesture Recognition Using Hidden Markov Models*, IEEE 22nd Signal Processing and Communications Applications Conference (SIU), (22-25 April 2014). [In Turkish]
- C2. **Necati Cihan Camgöz**, Cihan Tayşi, Amaç Güvensan, Elif Karsıgil, Gökhan Yavuz, *A Fast and Accurate Motion Detection Algorithm for Embedded Systems*, IEEE 21st Signal Processing and Communications Applications Conference (SIU), (24-26 April 2013). [In Turkish]
- C1. **Necati Cihan Camgöz**, Recep Öztürk, Cihan Tayşi, Amaç Güvensan, Gökhan Yavuz, *Image Processing Capabilities of New Generation ARM Cores for WMSNs*, IEEE 20th Signal Processing and Communications Applications Conference (SIU), (18-20 April 2012). [In Turkish]

## WORKSHOP PROCEEDINGS

- W5. **Necati Cihan Camgöz**, Simon Hadfield, Richard Bowden, *Particle Filter based Probabilistic Forced Alignment for Continuous Gesture Recognition*, IEEE 16th International Conference on Computer Vision Workshops (ICCVW), (29 October 2017).
- W4. **Necati Cihan Camgöz**, Simon Hadfield, Oscar Koller, Richard Bowden, *Using Convolutional 3D Neural Networks for User-Independent Continuous Gesture Recognition*, IEEE 23rd International Conference of Pattern Recognition Workshops (ICPRW), (4 December 2016).
- W3. **Necati Cihan Camgöz**, Ahmet Alp Kindiroğlu, Lale Akarun, *Sign Language Recognition for Assisting the Deaf in Hospitals*, 7th International Workshop on Human Behavior Understanding (HBU), (16 October 2016).
- W2. **Necati Cihan Camgöz**, Vitomir Štruc, Berk Gökberk, Lale Akarun, Ahmet Alp Kindiroğlu, *Facial Landmark Localization in Depth Images using Supervised Ridge Descent*, IEEE 15th International Conference on Computer Vision Workshops (ICCVW), (12 December 2015).

- W1. **Necati Cihan Camgöz**, Ahmet Alp Kindirođlu, Lale Akarun, *Gesture Recognition using Template Based Random Forest Classifiers*, 13th European Conference on Computer Vision Workshops (ECCVW), (6–7 September 2014).