

**Employment**

- 2011-present **Yeditepe University, Istanbul, Turkey.**  
Faculty of Engineering, Biomedical Engineering Department, Assistant *Professor*.  
Researcher in several projects in collaboration with colleagues from Marmara University, Istanbul University and Gülhane Military Medical Academy, with a goal of developing novel medical image computing algorithms to diagnosing breast and prostate cancer.  
Instructor of the courses “Biomedical Instrumentation”, “Biomedical Electronics II”, “Biomedical Instrumentation”, “Microprocessors and Microcontrollers in BME”, “Biomedical Sensors and Transducers”, “Medical Imaging”, “Engineering Project”, “Summer Practice” and “Introduction to Computing with MATLAB”.
- 2014-present **Yeditepe University Hospital, Istanbul, Turkey.**  
Ethical Committee for Clinical Research, *Board Member*.
- 2011-2015 **Yeditepe University, Istanbul, Turkey.**  
Faculty of Engineering, Biomedical Engineering Department, *Chair*.
- 2011-2014 **Yeditepe University, Istanbul, Turkey.**  
Faculty of Engineering and Architecture, *Board Member*.
- 2010-2011 **Turkish Armed Forces, Gülhane Military Medical Academy, Ankara, Turkey.**  
Biomedical Engineering Centre, *Second Lieutenant* (Military Service).  
Managed and directed research with a goal of developing signal acquisition devices and computational methods to detecting obstructive sleep apnea. Organised and coordinated research meetings at the centre.
- 2007-2010 **Institute of Cancer Research, Sutton, Surrey, UK.**  
CR-UK and EPSRC Cancer Imaging Centre, *Post Doctoral Training Fellow*.  
Managed research in MOCOBI project with a goal of developing computational methods to comparing breast images. The project was joint with University of Oxford, University of Manchester and University College London. Principal Investigator: Prof. Dr. Martin O. Leach.  
Attended, organized and reported to meetings for the project. Liaised with researchers at UCL, Oxford University and Manchester University working on the project.  
Supervised staff and students working on related projects at the institute.  
Refereed several leading scientific journals and conferences. Participated several international meetings.
- 1999-2007 **Boğaziçi University, Istanbul, Turkey.**  
Biomedical Engineering Institute, *Research Assistant*.  
Researcher in several projects in collaboration with colleagues from Marmara University and Istanbul University, with a goal of developing novel image computing algorithms to diagnosing cancer from breast images.  
Obtained grants from funding bodies for the projects.  
Gave oral presentations at several national/international meetings. Participated the organization of national/international conferences and summer schools.  
Assisted graduate courses “Systems Theory for Biomedical Science”, “Basic Mathematics for Biomedical Science” and “Biomedical Instrumentation Lab”.  
Designed/maintained the websites and generated/revised the dynamic web pages of the institute and the Medical Imaging Lab at Boğaziçi University (BUMIL). Worked as public relations officer at BUMIL.  
Developed “DynaMammoAnalyst”, an interactive dynamic analysis and decision support software for contrast-enhanced breast MR imaging.

**Education**

- 2001-2007 Boğaziçi University, Istanbul, Turkey. Biomedical Engineering Institute.  
**Doctorate in Biomedical Engineering.** (GPA: 3.94/4.00)  
Dissertation entitled *Lesion Detection in MR-Mammography: nMITR Maps, Dynamic and Morphological Descriptors*. Advisor: Assoc.Prof.Dr. H. Özcan Gülçür.
- 1999-2001 Boğaziçi University, Istanbul, Turkey. Biomedical Engineering Institute.  
**Master of Science in Biomedical Engineering.**  
Thesis entitled *Feature Extraction from Mammographic Mass Shapes and Development of a Mammographic Database*. Advisor: Assoc.Prof.Dr. H. Özcan Gülçür.
- 1994-1999 Erciyes University, Kayseri, Turkey. Engineering Faculty.

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|  | <p><b>Bachelor of Science in Electronics Engineering.</b><br/>Project entitled <i>Hospital Automation via Local Area Networks</i>.<br/>1991-1994 STFA Anatolian Vocational High School, Izmit, Turkey.<br/><b>Computer Software Technician.</b></p>   |
| <b>Certifications</b>                    | <p><b>Etik Kurulların Yapılanması için Standardizasyon Gereklilikleri Kursu.</b> Istanbul, Turkey, 2015.<br/><b>TÜBİTAK 2237 Sağlık Bilimleri Alanında Proje Hazırlama, Yazma ve Yürütme Eğitimi.</b> Yeditepe University, Istanbul, Turkey, 2014.<br/><b>Ulusal Akademik Ar-Ge Destek Programları Tanıtımı ve Proje Önerisi Hazırlama Eğitimi (EEAG).</b> TUBITAK, Ankara, Turkey, 2014.<br/><b>Biyomedikal Sinyal Kayıt Eğitimi.</b> SIMMERK Medical Simulation Centre, Istanbul, Turkey, 2014.</p>   |
| <b>Languages</b>                         | Turkish (mother tongue). Fluent English. Reasonable knowledge of German.  |
| <b>Communication</b>                     | <p><b>Thirteen papers</b> in leading scientific journals (<b>First author of eleven papers</b>).</p> <p><b>Sixty-three papers</b> at twenty international and sixteen national scientific meetings (A detailed list is available upon request).</p>   |
| <b>Computer Skills</b>                   | <p><b>Microsoft Word, Excel, PowerPoint and Access:</b> Professional-looking documents and charts, impactful presentations and efficient database handling with SQL.</p> <p><b>MATLAB, IDL, Delphi and FORTRAN:</b> Object oriented programming. Good knowledge of the syntax and component functions. Clean and fast functions.</p> <p><b>LabView:</b> Development of virtual biomedical devices.</p> <p><b>Proteus :</b> Electronic circuit design and simulation and printed circuit board design.</p> <p><b>Proton BASIC :</b> Programming of PIC microcontrollers. Efficient codes.</p> <p><b>SPSS :</b> Statistical analysis of medical image features.</p>   |
| <b>Specialties</b>                       | <p><b>Biomedical instrumentation and measurements.</b></p> <p><b>Medical image processing and computing:</b> Image enhancement, filtering, registration and segmentation. Feature extraction. Object recognition in 3D. FROC analysis.</p> <p><b>Magnetic resonance imaging (MRI):</b> Dynamic contrast enhanced MRI and diffusion weighted MRI for tissue characterization and lesion localization/detection.</p> <p><b>Statistical classification:</b> Bias corrected fuzzy c-means clustering. Fuzzy PCA based clustering. Fuzzy c-partitioning. Cellular neural networks. Radial basis neural networks. Multivariate Gaussian analysis. Utility based decision theory. ROC analysis.</p> <p><b>Database design and data/image retrieval:</b> Distributed databases. Content-based image retrieval using shape measures. Case-based reasoning. PACS.</p> <p><b>Software development.</b> Project management.</p> |
| <b>Short-Term Work Experience</b>        | <p><b>SONOMED Medical Imaging Centre, Istanbul, Turkey.</b><br/>Gained experience in <i>Breast Ultrasound and MR-Mammography</i>.</p> <p><b>Marmara University, Istanbul, Turkey.</b> Radiology Department.<br/>Gained experience in <i>Breast Cancer and X-ray Mammography</i>.</p> <p><b>TUBITAK Information Technologies Institute, Izmit, Turkey.</b> Robotic Department.<br/>Gained experience in <i>PLC Programming</i> and designed a robot controller keyboard.</p>   |
| <b>Grant Funding</b>                     | <p><b>EPSRC Research Grant.</b></p> <p><b>Cancer Research UK Research Grant.</b></p> <p><b>Boğaziçi University Research Grant (2 times).</b></p> <p>BUVAK Conference Attendance Support (3 times).</p> <p>Siemens Medical Solutions TR Travel Grant (2 times).</p> <p>TUBITAK Young Scientist Conference Attendance Support.</p> <p>Turkish Society of Magnetic Resonance Conference Attendance Support.</p>  |
| <b>Association Memberships</b>           | Institute of Electrical and Electronics Engineers ( <b>IEEE</b> ), Engineering in Medicine and Biology Society ( <b>EMBS</b> ), European Society for Magnetic Resonance in Medicine and Biology ( <b>ESMRMB</b> ), Turkish Society of Magnetic Resonance ( <b>TSMR</b> ).   |
| <b>Refereed Journals and Conferences</b> | <b>IEEE Transactions on Medical Imaging.</b> BMC Medical Imaging. Biomedical Signal Processing and Control. Computerized Medical Imaging and Graphics. BIYOMUT. ELECO. TIPTEKNO, ICECCO.  |