

# DOĞAÇ BAŞARAN

NETAŞ TELECOMMUNICATION A.S.  
Yenişehir Mah. Osmanlı Bulvarı No:11 34912  
Kurtköy-Pendik , Istanbul TURKEY  
Phone: +90 216 522 5557  
dogac.basaran@gmail.com  
www.dogacbasaran.com

## Education

- |           |  |
|-----------|--|
| 2005–2015 | <p><b>PhD</b> in Electrical and Electronics Engineering, Boğaziçi University, Istanbul, Turkey.</p> <p><i>Supervisor: Prof. Emin Anarım</i><br/><i>Co-advisor: Assoc. Prof. Ali Taylan Cemgil</i><br/><i>Thesis topic: Model Based Multiple Audio Sequence Alignment</i></p> |
| 2002–2005 | <p><b>MS</b> in Electrical and Electronics Engineering, Boğaziçi University, Istanbul, Turkey.</p> <p><i>Supervisor: Assoc. Prof. Kerem Harmancı</i><br/><i>Thesis: Blind Audio Source Separation with Convolutively Mixed Signals</i></p>                                   |
| 1997–2002 | <p><b>BS</b> in Electrical and Electronics Engineering, Boğaziçi University, Istanbul, Turkey.</p> <p><i>Supervisor: Prof. Bülent Sankur</i><br/><i>Thesis: Blind Source Separation with Duet Algorithm</i></p>  |
| 1991–1997 | High School in Antalya Anadolu Lisesi, Antalya, Turkey ( <i>3<sup>rd</sup> rank in graduation</i> )  |

## Professional Experience

- |              |  |   |
|--------------|--|---|
| 2014–present | <p>Research Engineer in SPiDR WebRTC Gateway-NETAS</p> <p><i>Business development specialist, Preparation of Tübitak TEYDEB Proposals, Preparation of H2020 project proposals (partnership), Codec optimization for low bandwidth channels, University Relations for long term Internship programme.</i></p> |   |
| 2008–2014    | Researcher at <b>TAM Project</b> (Teleiletişim ve Enformatik Alanlarında Araştırmacı ve Akademisyen Yetiştirme Merkezi Projesi)  |   |
| 2013         | Researcher in Audio Watermarking in Noise-free and Background Noise Environments project in Collaboration with Turk Telekom  |   |
| 2011–2012    | Researcher in Audio Sequence Alignment Project in Collaboration with Singular Software Inc. Canada   |   |
| 2010         | Researcher in Adaptive Noise Cancellation in Car Environment project in Collaboration with Ford Otosan   |   |
| 2005–2006    | Programmer in KDE which is subsidiary high-tech company of KDE Inc.  | <p><i>Worked on Smart Card solutions for Electronic Payment Systems and secure e-Commerce applications.</i></p> |
| 1999         | Worked in network planning department in Turkcell Communication Services A.. Istanbul Maltepe Plaza  |   |

## Teaching

2016–present	Instructor of "Fundamentals of Multimedia Communications" in Boğaziçi University (Graduate level)
2016–present	Instructor of "Introduction to Telecommunications" in Bahçeşehir University
2014–2015	Instructor of "Fundamentals of Multimedia Communications" in Bahçeşehir University
2014–2015	Instructor of "Introduction to Statistics for Social Sciences" in Boğaziçi University

## Publications

### Journals

- 2015 D. Başaran, A. T. Cemgil and E. Anarım, "A Probabilistic Model-Based Approach for Aligning Multiple Audio Sequences" in *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 23, No. 7, pp. 1160-1171, 2015.
- 2015 D. Başaran, A. T. Cemgil and E. Anarım, "Multi Resolution Multiple Audio Sequence Alignment using Sequential Monte Carlo Samplers" *IEEE Signal Processing Letters*, 2015 (Submitted).

### Conference Papers

- 2016 D. Başaran, A. T. Cemgil and E. Anarım, "Tempo Özütleme Öncül İşlemesi ile Model Tabanlı Çoklu Müzik Dizisi Hizalaması (Model Based Multiple Musical Sequence Alignment using Tempo Extraction as Preprocessing)", in Signal Processing and Communications Applications Conference, IEEE 24th, 2016 (Submitted).
- 2015 A. Atalay, D. Başaran, "SDP Compression Algorithm for WebRTC: ESDiPi", International Conference on Computer Systems and Instrumentation, 2015.
- 2015 B. Daldal, I. Bilgin, D. Başaran, S. Metin, "Using Web Services For WebRTC Signaling Interoperability", IEEE/IFIP Network Operations and Management Symposium, 2016 (Accepted).
- 2015 M. M. Suzgun, H. Pehlivan, C. Camgoz, A. Kindirliolu, D. Başaran, C. Togay, L. Akarun, "Hospisign: An Interactive Sign Language Platform for Hearing Impaired", International Conference on Computer Graphics, Animation and Gaming Technologies, 2015.
- 2013 D. Başaran, A. T. Cemgil and E. Anarım, "SMC Samplers for Multiresolution Audio Sequence Alignment" in International Conference on Acoustics Speech and Signal Processing ICASSP, 2013.
- 2013 D. Başaran, A. T. Cemgil and E. Anarım, "Belirlenimci Benzerlik Yöntemlerine Dayalı Model Tabanlı Ses Dizisi Hizalaması (Model Based Audio Sequence Alignment Based on Deterministic Similarity Methods)" in Signal Processing and Communications Applications Conference, IEEE 21th, 2013.
- 2011 D. Başaran, A. Cemgil and E. Anarım, "Model Tabanlı Ses Dizisi Hizalaması (Model based audio sequence alignment)" in Signal Processing and Communications Applications (SIU), 2011 IEEE 19th Conference on, pp. 606 -609, April 2011.
- 2011 D. Başaran, A. T. Cemgil and E. Anarım, "Model Based Multiple Audio Sequence Alignment" in Proc. IEEE Workshop on Applications of Signal Processing to Audio and Acoustics WASPAA '11, pp. 13-16, 2011. CPCI-S.

## Patents

2015 | D. Başaran, A. Atalay, "SDP verilerinin sıkıştırılması için bir veri sıkıştırma yöntemi", TPE, 2015 (Submitted).

## Research Interests

Musical Signal Processing, Multiple Audio Alignment, Audio Fingerprinting (Audio Matching), Statistical Signal Processing, Bayesian and approximate inference, Machine Learning, Audio Source Separation, Network Multimedia Communications (Video Coding Algorithms), 4G-LTE and 5G Networks, Internet of Things

## Computer Skills

Programming Languages: C/C++, Visual C++, Objective C, Visual basic, Java, Assembly, Matlab, Latex  
Tools: AVR Studio, Microsim Designlab 8.0, Spice

## Awards and Memberships

2008–present | IEEE Student Member  
1997 | ÖYS Turkey's 193'th out of 1,000,000 high scoring in National maths & science

## References

*Prof. Emin Anarım* - Boğaziçi University Electrical and Electronics Engineering Department Academic

*Prof. Kadri Özçaldıran* - Boğaziçi University Electrical and Electronics Engineering Department Academic

*Assoc. Prof. Ali Taylan Cemgil* - Boğaziçi University Computer Engineering Department Academic

*Prof. Fatih Alagöz* - Boğaziçi University Computer Engineering Department Academic