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EDUCATION

2015-2021	Erciyes University, Electrical and Electronics Engineering, PhD
2001-2005	Mersin University, Electrical and Electronics Engineering, MSc
1996-2001	Kocaeli University, Electronics and Communication Engineering, BSc

ACADEMIC POSITIONS

08/2024- present	Assist. Prof. Dr., Department of Electrical and Electronics Engineering, Atilim University, Turkey
02/2023-07/2024	Assist. Prof. Dr., Department of Electrical and Electronics Engineering, Bandırma Onyedi Eylül University, Turkey
07/2022-02/2023	Assist. Prof. Dr., Program of Electronics Technology, Ostim Technical University, Turkey
11/2008-07/2022	Instructor, Program of Electronics and Communication Technology, Kırşehir Ahi Evran University, Turkey
09/2006-02/2007	Instructor, Department of Electronics Education, Mersin University, Turkey
11/2001-03/2005	Research Assistant, Department of Electrical and Electronics Engineering, Mersin University, Turkey

RESEARCH INTERESTS

1	Microstrip Patch Antenna Design
2	THz and mm-wave antennas
3	RF and Microwave Theory
4	Wearable Antennas
5	Electromagnetics

PUBLICATIONS (SCI, SCI-E)

3	Hakanoglu, B. G., Kilic, V. T., Altindis, F., Turkmen, M. (2023). Crown Shaped Edge Multiband Antenna Design for 5G and X-Band Applications. *Wireless Networks*, vol. 29, pp. 3255-3270.
2	Turkmen, M., Gunes, Y.E., Hakanoglu, B.G. et al. (2022). Dual-Band Patch Antenna with Simple Rectangular Shaped Slots for Local Area Networks. *Wireless Personal Communication*, vol. 123, no 2, pp. 1047-1058.
1	Hakanoğlu, B. G., Koc, B., Sen, O., Yalduz, H., Turkmen, M. (2021). Stub Loaded Patch Antenna and a Novel Method for Miniaturization at Sub 6 GHz 5G and Wi-Fi Frequencies. *Advances in Electrical and Computer Engineering (AECE)*, vol. 21, no. 2, pp. 23-32.

PUBLICATIONS (TR INDEX)

5	Hakanoğlu, B. G. (2024). 6g Ağlarında Dikdörtgen Yarıklı Kare Yama Antenin Farklı Dielektrik Malzemeler İçin Işıma Karakteristıkleri Analızi. *Mühendislik Bilimleri ve Araştırmaları Dergisi,* vol. 6, no. 1, pp. 105-112.
4	Hakanoğlu, B. G. (2024). The Effect of Different Dielectric Materials on Radiation Features of Slotted Patch Antennas for 6G Communication Systems. *Uludağ Üniversitesi Mühendislik Fakültesi Dergisi,* vol. 29, no. 1, pp. 263-278.
3	Sarıkaya, K., Hakanoğlu, B. G., Keser, S. (2023). X ve Ku Bandı İçin Dikdörtgen Ve Simetrik L-Şekilli Yarıklara Sahip Çoklu Bant Yama Antenlerde Malzeme Etkileri. *Düzce Üniversitesi Bilim ve Teknoloji Dergisi,* vol. 11, no. 2, pp. 1094-1104.
2	Hakanoğlu, B. G., Hayber, S. E., Türkmen, M. (2021). Design Equation for Operating Frequency of Patch Antenna with a Rectangular Tuning Stub at Early Phase 5G Bands. *Academic Platform-Journal of Engineering and Science,* vol. 9, no. 3, pp. 403-410.
1	Hakanoğlu, B. G., Yalduz, H., Koc, B., Hayber, S. E., Türkmen, M. (2020). Comparative Analysis of the Effects of the Substrate Material and Deltoid Shaped Slots on Patch Antennas for 5G Networks at 37 GHz and 39 GHz. *Avrupa Bilim ve Teknoloji Dergisi*, Ejosat Special Issue 2020 (ARACONF), pp. 405-411.

TUSAŞ LIFT-UP PROJECTS

2	Noise Suppression in Aircraft Device Wiring, TUSAŞ LIFT-UP, Advisor, (01.09.2025- ongoing)
1	Data-Link Communication in Unmanned Aerial Vehicles, TUSAŞ LIFT-UP, Advisor, (01.09.2024-01.07.2025)

TÜBİTAK 2209A-2209B PROJECTS

3	Data-Link Communication in Unmanned Aerial Vehicles, TÜBİTAK 2209-B, Advisor, (08.04.2025-…) Ongoing
2	A New Patch Antenna Design at 5G Frequencies for Smart Grid Data Communication Networks, TÜBİTAK 2209-A, Advisor, (08.04.2025-…) Ongoing
1	A New Patch Antenna Design for Device-to-Device Communication and Wearable Technologies in 5G Networks, TÜBİTAK 2209-B, Advisor, (14.04.2024-03.04.2025) Completed

UNIVERSITY PROJECTS

5	Design and Optimization Analysis of Millimeter Wave Array Patch Antennas with Defected Ground Structure at 5G Bands, Lisans Araştırma Projesi (LAP), Manager, (07.11.2025) Ongoing.
4	Piezoelectric-Based Energy Harvesting System for Sustainable Cities, Atılım Üniversitesi Öğrencileri Araştırma Kariyeri (ATAK), Advisor, (07.11.2025-…) Ongoing.
3	Precise Control of Pitch Angle in Autonomous Underwater Rockets, Atılım Üniversitesi Öğrencileri Araştırma Kariyeri (ATAK), Advisor, (07.11.2025-…) Ongoing.
2	Development of a New Patch Antenna Model for Fifth Generation Wireless Communication, Atılım Üniversitesi Öğrencileri Araştırma Kariyeri (ATAK), Advisor, (30.11.2024-01.09.2025) Completed.
1	Investigation of New Patch Antenna Designs with Different Dielectric Materials for Smart Grid Network Data Communication, Bandırma Onyedi Eylül University Scientific Research Project, Project No: BAP-23-1004-009, Researcher, (25.12.2023-25.12.2024) Completed.

CONFERENCE PRESENTATIONS (Full Paper)

16	Gaye Nur Akküp, Barış Gürcan Hakanoğlu, “Comparative Analysis Of Substrate Materials For 2×4 High Gain X-Band Patch Antenna Design For Radar Applications ,” 16. Uluslararası Mühendislik, Mimarlık ve Tasarım Kongresi, 20-22 Aralık 2025, İstanbul
15	Göksenin Serttaş, Barış Gürcan Hakanoğlu, “How Can Deep Learning Models Be Optimized For Real-Time RF Signal Classification On Resource-Constrained Devices?”, 16. Uluslararası Mühendislik, Mimarlık ve Tasarım Kongresi, 20-22 Aralık 2025, İstanbul
14	Barış Gürcan Hakanoğlu, Emine Ağaya, Gönül Gülmez, Serkan Yalınsu, “5G Ağlarında Yama Antenler İçin Dikdörtgen Yarıkların Laminat ve Giyilebilir Malzemelerde Karşılaştırmalı Analizi”, Elektrik-Elektronik ve Biyomedikal Mühendisliği Konferansı (ELECO) 2024, 28-30 Kasım 2024, Bursa, Türkiye.
13	Baris G. Hakanoglu, Mustafa Turkmen, “Investigation of the Effects of the Slot Parameters on a Patch Antenna at 28 GHz Related to the Operating Wavelength “, *The 15th Global Symposium on Milimeter-Waves&Terahertz (GSMM2024)*, 20–22 May 2024, Hong Kong, China.
12	Barış Gürcan Hakanoğlu, “Comparative Analysis Of Rectangular Slots And Different Substrate Materials For A Square Patch Antenna For 6G Communicatıon Systems*”, VII. International Conference on Engineering Sciences,* 9-10 Februray 2024, Ankara, Türkiye.
11	Barış Gürcan Hakanoğlu, “Comparative Analysis of the Effects of Rectangular Slots and Defected Ground for Different Materials on Patch Antennas at 6G Frequency Bands”, *VII. International Marmara*

	Scientific Research and Innovation Congress, 27-28 January 2024, Istanbul, Türkiye.
10	Barış Gürcan Hakanoğlu, "6G Haberleşme Sistemleri İçin Yarıklı Yama Antenlerde Farklı Dielektrik Malzemelerin Yayılma Karakteristiklerine Etkisi", *Elektrik-Elektronik ve Biyomedikal Mühendisliği Konferansı (ELECO) 2022*, 24-26 Kasım 2022, Bursa, Türkiye.
9	Kübra Sarıkaya, Barış Gürcan Hakanoğlu, "X ve Ku Bantlarında Çalışan Yama Antende Asimetrik Dikdörtgen Yarıkların Etkisi", *I. Savunma Sanayi Sempozyumu ve Sergisi*, 13-15 Ekim 2022, Kayseri, Türkiye.
8	Mehmet Güçyetmez, Barış Gürcan Hakanoğlu, "A New Antenna Model for Smart Grid Data Communication at 868 MHz ZigBee Band", *XIV. International Conference on Engineering&Natural Sciences*, 18-19 July 2022, Sivas, Türkiye.
7	Baris G. Hakanoglu, Osman Sen, Burak Koc, Sekip Esat Hayber, Mustafa Turkmen, "Defected Grounded Rectangular Patch Antenna with Rhombic-Shaped Slots for Early Phase 5G Applications ", *XXXIII. International Union of Radio Science (URSI) General Asembly&Scientific Symposium (GASS)*, 29 August–5 September 2020, Rome, Italy.
6	Baris G. Hakanoglu, Sekip Esat Hayber, Omer Galip Saracoglu, Mustafa Turkmen, "Optimization of Feed Line Parameters of a Square Microstrip Patch Antenna at 39 GHz for 5G Designs", *International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)*, 19 – 21 October 2018, Ankara, Turkey.
5	Baris G. Hakanoglu, Mustafa Turkmen, "The Effect of Diamond – Shaped Slots in Square Microstrip Patch Antenna At 39 GHz", *International Symposium on Graduate Research in Science Focus on Innovation and Entrepreneurship*, 4 – 6 October 2018, Istanbul, Turkey.
4	Baris G. Hakanoglu, Mustafa Turkmen, "The Effect of the Slot Edge Dimension on the Operating Frequency of a Square Microstrip Patch Antenna for 5G Communication Networks", *IX. URSI – Türkiye Bilimsel Kongresi Ulusal Genel Kurul Toplantısı*, 6 – 8 Eylül 2018, Konya, Türkiye.
3	Baris G. Hakanoglu, Mustafa Turkmen, "Comperative Investigation of the Slot Edge Dimensions for a Square Microstrip Patch Antenna at 28 GHz and 39 GHz for 5G Applications", *II. Bilimsel ve Mesleki Çalışmalar Sempozyumu,* 5 – 8 Temmuz 2018, Nevşehir, Türkiye.
2	Baris G. Hakanoglu, Osman Sen, Mustafa Turkmen, "A Square Microstrip Patch Antenna With Enhanced Return Loss Through Defected Ground Plane For 5G Wireless Networks ", *II. International Union of Radio Science (URSI) Atlantic Radio Science Meeting (AT-RASC),* 28 Mayıs–01 Haziran 2018, Meloneras, Gran Canaria, İspanya.

1	Baris G. Hakanoglu, Mustafa Turkmen, " An Inset Fed Square Microstrip Patch Antenna To Improve the Return Loss Characteristics for 5G Applications ", *XXXII. International Union of Radio Science (URSI) General Asembly & Scientific Symposium (GASS)*, 19 – 26 Ağustos 2017, Montreal, Quebec, Kanada.

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	7
H-index (ISI Web of Science):	2

COURSES GIVEN

1	EE210 Circuit Analysis II 2025-2026 Spring
2	EE310 RF and Microwave Engineering 2025-2026 Spring
3	EE405 Antennas and Propagation 2025-2026 Spring
4	EE494 Engineering Design Project II 2025-2026 Spring
5	EE209 Circuit Analysis I 2025-2026 Fall
6	EE410 Communication Electronics 2025-2026 Fall
7	EE493 Engineering Design Project I 2025-2026 Fall