


Curriculum Vitae																					
																					
Name Surname	Busra KARAHAN																				
Date of Birth:	14 March 1993, Tokat, Türkiye.																				
Office Contact:	Department of Electrical and Electronics Engineering, Faculty of Engineering, Nuh Naci Yazgan University, Kayseri, Türkiye. Phone : +90-352-324-00-00 / 2258 E-mail: bceniklioglu@nny.edu.tr ;																				
Academic Title & Department:	Research Assistant, Nuh Naci Yazgan University, Kayseri, Türkiye. (2018-)																				
Academic Qualifications:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Degree</th> <th style="width: 25%;">University</th> <th style="width: 25%;">Date</th> <th style="width: 25%;">Score</th> </tr> </thead> <tbody> <tr> <td>School of Foreign Languages</td> <td>School of Foreign Languages</td> <td>2011-2012</td> <td>89/100</td> </tr> <tr> <td>Bachelor's Degree</td> <td>Erciyes University- Electrical- Electronics Engineering</td> <td>2012-2016</td> <td>3.21/4</td> </tr> <tr> <td>Master's Degree</td> <td>Erciyes University- Electrical- Electronics Engineering</td> <td>2016-2018</td> <td>3.63/4</td> </tr> <tr> <td>PhD*</td> <td>Erciyes University- Electrical- Electronics Engineering</td> <td>2018-</td> <td>3.69/4</td> </tr> </tbody> </table> <p style="text-align: center;">*2021-2022 Lakehead University PhD Visiting Scholar (TUBITAK, BIDEB 2214-A)</p>	Degree	University	Date	Score	School of Foreign Languages	School of Foreign Languages	2011-2012	89/100	Bachelor's Degree	Erciyes University- Electrical- Electronics Engineering	2012-2016	3.21/4	Master's Degree	Erciyes University- Electrical- Electronics Engineering	2016-2018	3.63/4	PhD*	Erciyes University- Electrical- Electronics Engineering	2018-	3.69/4
Degree	University	Date	Score																		
School of Foreign Languages	School of Foreign Languages	2011-2012	89/100																		
Bachelor's Degree	Erciyes University- Electrical- Electronics Engineering	2012-2016	3.21/4																		
Master's Degree	Erciyes University- Electrical- Electronics Engineering	2016-2018	3.63/4																		
PhD*	Erciyes University- Electrical- Electronics Engineering	2018-	3.69/4																		
Academic Interests:	MISO Systems, Index Modulation, RIS, Hardware Impairments, Localization, B5G.																				
Research Projects:	<ol style="list-style-type: none"> 1. “Design of RIS-Assisted OFDM-IM Systems with High Hardware Impairments Tolerance for 5G and Beyond Communication Systems”, TUBITAK 1001 Project, 122E242, PhD Scholar, July 2022- . 2. “Creation of Brain Equivalent Tissues for Dosimetry, Hyperthermia and SAR Calculations at 2G and 3G Communication Frequencies and Determination of Phantom Electrical Values by Flexible Computing Methods”, TUBITAK 1001 Project, 115E221, MA Scholar, December 2016-December 2017. 3. “Development of New OFDM Techniques Alternative to OFDM for 5th Generation Communication Systems”, BAP, FYL-2017-7676, Researcher, 2018. 																				

Assisted Laboratory Courses:	<ul style="list-style-type: none"> • Measurement and Analysis Lab. • Electronic Circuits Lab. 1 • Electronic Circuits Lab. 2 • Communication Lab. • Logic Lab.
Master's Theses:	<p>B. Ceniklioglu, Development of Alternative New OFDM Technologies in OFDM for 5th Generation Communication Systems, Erciyes University, Master's Thesis, 2018.</p> <p>Supervisor: Professor Ibrahim DEVELI</p>
Awards and Honors	<ul style="list-style-type: none"> • 2020/1 TUBITAK, BİDEB 2214-A During PhD Research Fellowship Programme-12 months • Nuh Naci Yazgan University, Scientific Publication Incentive, September 2022. • TUBITAK, Scientific Publication Incentive, March 2023. • TUBITAK, Scientific Publication Incentive, November 2023. • Nuh Naci Yazgan University, Scientific Publication Incentive, March 2023.
Memberships:	<p>IEEE Graduate Student Member (2022-)</p> <p>IEEE Communications Society (2022-)</p> <p>IEEE Women In Engineering (2022-)</p>
Publications:	<p>Papers published in international journals indexed in SCI, SSCI, and AHCI:</p> <ol style="list-style-type: none"> 1. Tubail, D., Ceniklioglu, B., Canbilen, A. E., Develi, I., and Ikki, S., “Error Bounds for 3D Localization and Maximum Likelihood Estimation of mm-wave MISO OFDM Systems in the Presence of Hardware Impairments”, IEEE Communications Letters, vol. 26, no.9, pp. 2042-2046, 2022, DOI 10.1109/LCOMM.2022.3186789. 2. Tubail, D., Ceniklioglu, B., Canbilen, A. E., Develi, I., and Ikki, S., “The Effect of Hardware Impairments on the Error Bounds of Localization and Maximum Likelihood Estimation of mm-Wave MISO-OFDM Systems”, IEEE Transactions on Vehicular Technology, vol.72, no.3, pp.4063-4067, 2023. 3. Ceniklioglu, B., Develi, I., and Canbilen, A. E., “Error Analysis of OFDM-IM Systems for Beyond 5G: The Effect of IQI at Transceiver”, International Journal of Communication Systems, 2024, DOI 10.1002/DAC.5868. <p>Papers published in journals indexed in Engineering Index (EI):</p> <ol style="list-style-type: none"> 1. Ceniklioglu, B., Tubail, D., Canbilen, A. E., Develi, I., and Ikki, S., “Error Analysis of the Joint Localization and Synchronization of RIS-Assisted mm-Wave MISO-OFDM Under the Effect of Hardware Impairments”, IEEE Open Journal of the Communications Society, vol.3, pp.2151-2161, 2022 (ESCI).

Refereed Congress:

1. Alsalameh, H., Develi, I., **Karahan, B.**, “On the Performance of OTFS-IM: Impact of Hardware Impairments”, *IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT), 2024, Accepted*, Mandi, India.
2. Lafci, M., Develi, I., **Karahan, B.**, “Simulation-based performance analysis of OFDM-IM systems over double shadowed κ - μ distribution”, *Invitation to The 4th International Conference On Innovative Academic Studies, ICIAS, 2024, Accepted*, Konya, Turkey.
3. Alsalameh, H., Develi, I., **Karahan, B.**, “On the BER Performance of OTFS-IM Systems with Barrage Jamming”, *IEEE International Conference on Contemporary Computing and Communications, (InC4), 2024, Accepted*, Bangalore, India.
4. **Ceniklioglu, B.**, Develi, I., Canbilen, A. E., “The Effect of Hardware Impairments on OFDM-IM Systems over Generalized Non-Homogeneous Fading Channels”, *IEEE International Conference on Communication, Networks, and Satellite (ComNetSat), 2023*, Malang, Indonesia, DOI: 10.1109/COMNETSAT59769.2023.10420554 (Online/ Full Paper).
5. **Ceniklioglu, B.**, Develi, I., Canbilen, A. E., “Reconfigurable Intelligent Surface-Assisted OFDM-IM for Beyond 5G Mobile Networks: ML and LLR Detector Designs”, *IEEE International Conference on Contemporary Computing and Communications, (InC4), 2023*, Bangalore, India, DOI: 10.1109/InC457730.2023.10262978 (Online/ Full Paper).
6. **Ceniklioglu, B.**, Develi, I., Canbilen, A. E., “On the Performance of RIS-Assisted OFDM-IM: Impact of Hardware Impairments”, *IEEE Symposium on Wireless Technology & Applications, ISWTA, 2023*, Kuala Lumpur, Malaysia, DOI: 10.1109/ISWTA58588.2023.10249404 (Online/ Full Paper).
7. **Ceniklioglu, B.**, Develi, I., Canbilen, A. E., Lafci, M., “Analysis of Average Bit Error Rate for OFDM-IM Systems with Hardware Impairments over Nakagami- m and Weibull Fading Channels”, *International Conference on Computing, Communication, Security & Intelligent Systems, IC3SIS, pp. 1-6, 2022*, Kochi, India, DOI: 10.1109/IC3SIS54991.2022.9885400 (Online/ Full Paper).
8. Conger, S., **Ceniklioglu, B.**, Develi, I., “FPGA Implementation of OFDM-IM Systems over Weibull Fading Channels”, *3. International Cappadocia Scientific Research Congress*, pp.1687-1692, 2022, Nevşehir, Turkey (In Person/ Full Paper).
9. Lafci, M., **Ceniklioglu, B.**, Canbilen, A. E., Develi, I., “On the ABER Performance of an OFDM-IM System over Alpha-Mu Fading Channels”, *4th International Conference on Telecommunication, Electronic and Computer Engineering, ICTEC, 2022, Accepted*, Melaka, Malaysia (Online/ Full Paper).
10. Lafci, M., **Ceniklioglu, B.**, Canbilen, A. E., Develi, I., “Performance Analysis of OFDM-IM Systems over Generalized κ - μ and η - μ Fading Channels”, *Second International Conference on Next Generation Intelligent Systems, ICNGIS 2022*, pp. 1-5, Kerala, India (Online/ Full Paper).

	<ol style="list-style-type: none"> 11. Conger, S., Ceniklioglu, B., Develi, I., “Investigation of the Effect of High Level Modulations on the Performance of OFDM-IM Systems over Weibull and Nakagami-m Fading Channels”, 3. International Conference On Applied Engineering and Natural Sciences,” 2022, pp.1396-1401, Konya, Turkey (Online/ Full Paper). 12. Conger, S., Ceniklioglu, B., Develi, I., “Performance Analysis of Different High-Level Modulation Techniques for OFDM-IM System”, 2. International Cappadocia Scientific Research Congress 2022, pp.1515-1524, Nevşehir, Turkey (Online/ Full Paper). 13. Cenikliođlu, B., Develi, I., “5G ve Ötesi Sistemler için Mm-dalga İletişimi”, International Conference on Human Computer Interaction, Optimization and Robotic Applications, SETSCI Conference Proceedings, pp. 217-221, 5-7 Temmuz 2019, Nevşehir, Turkey (In Person/ Full Paper). 14. Cenikliođlu, B., Özen, A., Develi, I., “ZT DWT-S OWDM: A New Waveform for PAPR Reduction”, IEEE 41th International Conference on Telecommunications and Signal Processing, TSP 2018, pp. 1- 4, July 4-6, 2018, Athens, Greece (In Person/ Full Paper). 15. Cenikliođlu, B., Özen, A., and Develi, I., “Zero-Tail Discrete Wavelet Transform Spread OFDM System for 5G and Beyond”, IEEE 26th Signal Processing and Communications Applications SIU 2018, pp. 1-4 (CD-ROM), May 2-5, 2018, İzmir, Turkey (In Person/ Full Paper). 16. Cenikliođlu, B., Özen, A., Develi, I., “5G’ye Aday Modülasyon ve Dalga Biçimlerinin Gözden Geçirilmesi”, 2. International Scientific and Vocational Studies Congress, BİLMES 2018, Temmuz 2018, Nevşehir, Turkey (Online/ Abstract Paper).
Administrative Tasks	<ul style="list-style-type: none"> • NNYU-Opening Events Commission Member (2018-2019) • NNYU-Spring Festival Commission Member (2018-2019) • NNYU-Graduation Ceremony Commission Member (2018-2019) • NNYU-Commission Member for Introductory and Opening Events (2019-2020) • NNYU-National Internship Programme Document Control Commission Member (2021-2022) • NNYU-Spring Festival Commission Member (2021-2022) • NNYU-Graduation Ceremony Commission Member (2021-2022) • NNYU-Member of Publicity Commission (2021-2022) • NNYU-Graduation Ceremony Commission Member (2022-2023) • NNYU-Member of Publicity Commission (2022-2023) • NNYU-Chairman of the Thesis Examination Committee (2023-2024) • NNYU-Graduation Ceremony Commission Member (2023-2024) • NNYU-Promotion Commission Member (2023-2024)

Experience	Title	Institution	
	Quality Control Engineer	Hedef Kablo A.Ş.	February 2018-July 2018
	Intern	2nd Air Supply Maintenance Centre Command	July 2015-August 2015
	Intern	Kayseri TCDD	June 2015-July 2015
	Intern	KCETAŞ	June 2014-August 2014
Events	<ul style="list-style-type: none"> • Tübitak Horizon Europe Kayseri Information Day- Participant-17.10.2022 • MathWorks/Figes A.Ş. Turkey Academic Forum 2022-Invited Speaker-19.10.2022 • Turkey Qualifications Framework Introduction Days- Participant-09.11.2022 • Education within the scope of YÖK-MEB cooperation, Kayseri Osman Ulubaş Science High School, September-December 2022. • Within the scope of the programme held by Çukurova University between 02-06 October 2023 Received "Training of Trainers" certificate. 		

