CURRICULUM VITAE

1.   **Name**   **: Lida Kouhalvandi**
2.   **Date of Birth**   **:**
3.   **Academic Title**   **: Assistant professor**
4.   **Education**   **: Electronics engineering**

5.   **Institution**   **: Doğuş University**

Degree	Program	University	Date
BA	**Electronics engineering**	Islamic Azad University of Tabriz, Iran	30.06.2011
MA	**Electronics engineering**	Istanbul Technical University, Turkey	30.06.2015
PhD,	**Electronics engineering**	Istanbul Technical University, Turkey	17.05.2021

5.   **Academic Titles**   **Date**
     Assistant Professor   : 29.09.2021
     Associate Professor   : -
     Full Professor   : -

6.   **Theses Supervised**
     6.1. M.A. /MBA/MS Theses: -
     6.2. Ph.D. Theses: -

7.   **Publications**

7.1. Articles published in SCI, SSCI, AHCI journals

- [2021] F. Mir, **L. Kouhalvandi**, L. Matekovits, E.O. Gunes, "Automated Optimization for Broadband Flat-Gain Antenna Designs with Artificial Neural Network," *IET Microw. Antennas Propag. 15(12), 1537– 1544 (2021), doi: 10.1049/mia2.12137.*

- [2020] **L.Kouhalvandi**, O.Ceylan, S.Ozoguz, "Automated Deep Neural Learning based Optimization for High Performance High Power Amplifier Designs," *IEEE Transactions on Circuits and Systems I: Regular Papers, doi: 10.1109/TCSI.2020.3008947.*

- [2020] **L.Kouhalvandi**, O.Ceylan, S.Ozoguz, " Optimization techniques for analog and RF circuit designs: an overview," *Analog Integrated Circuits and Signal Processing, doi:10.1007/s10470-020-01733-7.*

- [2020] **L.Kouhalvandi**, O.Ceylan, S.Ozoguz, "Automated top-down pruning optimization approach in RF power amplifier designs," *Analog Integrated Circuits and Signal Processing, doi:10.1007/s10470-020-01730-w.*

- [2017] **L.Kouhalvandi,**, O.Ceylan, S.Paker, H.B.Yagci,. "Design and realization of a novel planar array antenna and low power LNA for Ku-band small satellite communications," *Turkish Journal of Electrical Engineering and Computer Sciences, 25(2), 1394-1403, doi: 10.3906/elk-1509-148.*

7.2. Articles published in other international indexed journals

➢ [2018] S. Aygun, **L.Kouhalvandi**, E.O.Gunes, "1.5 Bit/Stage, 12-Bit Pipeline ADC Design with Foreground Calibration," *International Journal of Advancements in Electronics and Electrical Engineering - IJAEEE 2018, Volume 6 : Issue 2 [ISSN:2319-7498].*

7.3. Conference (International)

➢ [2021] **L. Kouhalvandi**, L. Matekovits, I. Peter, "Key Generation of Biomedical Implanted Antennas Through Artificial Neural Networks", *Proceedings of IEEE/ACM Conference on Connected Health Applications, Systems, and Engineering Technologies* (IEEE/ACM CHASE 2021), 16 - 18 Dec 2021, Washington D.C., USA.

➢ [2021] **L. Kouhalvandi**, L. Matekovits, I. Peter, "Deep Learning and its Benefits in Prediction of Patients Through Medical Images", *Proceedings of IEEE/ACM Conference on Connected Health Applications, Systems, and Engineering Technologies* (IEEE/ACM CHASE 2021), 16 - 18 Dec 2021, Washington D.C., USA.

➢ [2021] **L. Kouhalvandi**, L. Matekovits, S. Ozoguz, "Conjointly Electromagnetic Simulations for Bended Microstrip Antenna Designs", *13th International Conference on Electrical and Electronics Engineering (ELECO)* (ELECO 2021), 25 - 27 Nov 2021, Bursa, Turkey.

➢ [2021] **L. Kouhalvandi**, L. Matekovits, "Prediction of Class-Amplifiers with the Aid of Neural Network", *EExPolytech-2021: Electrical Engineering and Photonics* , 14 - 15 Oct 2021, Saint Petersburg, Russia.

➢ [2021] **L. Kouhalvandi**, F. Mir, L. Matekovits, "Patch Antenna Array Design through Bottom-Up and Bayesian Optimizations", *IEEE Antennas and Propagation Society (AP-S)* , pag. ***, 4 - 10 Dec 2021, marina bay sands, Singapore.

➢ [2021] **L. Kouhalvandi**, L. Matekovits, I. Peter, "Multi-band Implantable Microstrip Antenna on Large Ground Plane and TiO2 Substrate", *17th IEEE International Conference on Wearable and Implantable Body Sensor Networks* (BSN 2021), pp. 1-4, doi: 10.1109/BSN51625.2021.9507029.

➢ [2021] **L. Kouhalvandi**, L. Matekovits, "Automated Power Amplifier Design through Multiobjective Bottom-Up and Particle Swarm Optimizations using Neural Network," at International youth conference on electronics, telecommunications, and information technologies (YETI) 2021, Saint Petersburg, Russia.

➢ [2021] F. Mir, **L. Kouhalvandi**, L. Matekovits, "Tunable Frequency Selective Surface Design Using Automated Random Optimization," *2021 XXXIVth General Assembly and Scientific Symposium of the International Union of Radio Science (URSI GASS),* 2021, pp. 1-4, doi: 10.23919/URSIGASS51995.2021.9560483.

➢ [2021] **L. Kouhalvandi**, O. Ceylan, S. Ozoguz, "Multi-objective Efficiency and Phase Distortion Optimizations for Automated Design of Power Amplifiers Through Deep Neural Networks," *2021 IEEE MTT-S International Microwave Symposium (IMS),* 2021, pp. 233-236, doi: 10.1109/IMS19712.2021.9574937.

- [2020] F. Mir, **L. Kouhalvandi**, L. Matekovits, E.O. Gunes, "Electromagnetic BottomUp Optimization for Automated Antenna Designs," in *2020 IEEE Asia-Pacific Microwave Conference (APMC), Hong Kong, Hong Kong, 2020, pp. 792-794, doi: 10.1109/APMC47863.2020.9331411.*

- [2020] F. Mir, L. Matekovits, **L. Kouhalvandi**, E.O. Gunes, "Optimization for Wideband Linear Array Antenna through Bottom-Up Method," in *2020 IEEE International Conference on Electrical Engineering and Photonics (EExPolytech), St. Petersburg, Russia, 2020, pp. 51-54, doi: 10.1109/EExPolytech50912.2020.9243969.*

- [2020] **L. Kouhalvandi**, M. Pirola and S. Ozoguz, "Automated Two-Step Power Amplifier Design with Pre-constructed Artificial Neural Network," *2020 43rd International Conference on Telecommunications and Signal Processing (TSP), Milan, Italy, 2020, pp. 617-620, doi: 10.1109/TSP49548.2020.9163468.*

- [2020] S. Aygun, **L.Kouhalvandi**, E. O. Gunes and S. Ozoguz , "Inspecting Distortion in the Power Amplifiers with the aid of Neural Networks," *2020 22nd International Conference on Advanced Communication Technology (ICACT), Phoenix Park, PyeongChang, Korea (South), 2020, pp. 448-453.*

- [2019] **L.Kouhalvandi** , O. Ceylan and S. Ozoguz, "Automated RF Power Amplifier Optimization and Design: From Lumped Elements to Distributed Elements," *IEEE 2019 27th Telecommunications Forum (TELFOR), Belgrade, Serbia, 2019, pp. 1-4.*

- [2019] **L.Kouhalvandi** , O. Ceylan and S. Ozoguz, "Automated Matching Network Modeling and Optimization for Power Amplifier Designs," *2019 11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 2019, pp. 510-513, doi: 10.23919/ELECO47770.2019.8990407.*

- [2019] **L.Kouhalvandi** , O. Ceylans and S. Ozoguz, "A Review on Optimization Methods for Designing RF Power Amplifiers," *2019 11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 2019, pp. 375-378, doi: 10.23919/ELECO47770.2019.8990396.*

- [2019] **L.Kouhalvandi** , E. O. Gunes and S. Ozoguz, "Algorithms for Speeding-Up the Deep Neural Networks For Detecting Plant Disease," *2019 8th International Conference on Agro-Geoinformatics (Agro-Geoinformatics), Istanbul, Turkey, 2019, pp. 1-4.*

- [2019] H. A. Yildiz, **L.Kouhalvandi** and S. Ozoguz, "CMOS Current-Mode Exponential/Logarithmic Function Generator Based on Translinear Loop Configuration," *2019 42nd International Conference on Telecommunications and Signal Processing (TSP), Budapest, Hungary, 2019, pp. 535-538.*

- [2018] **L.Kouhalvandi**, O. Ceylan and H. B. Yagci, "Power Amplifier Design Optimization with Simultaneous Cooperation of EDA Tool and Numeric Analyzer," *2018 18th Mediterranean Microwave Symposium (MMS), Istanbul, Turkey, 2018, pp. 202-205.*

- [2017] S. Aygun, **L.Kouhalvandi**, B. Ors and E. O. Gunes, "Karatsuba Ofman Multiplication implementation on SystemC for Diffie-Hellman Key Exchange algorithm,"

2017 IEEE 4th International Conference on Knowledge-Based Engineering and Innovation (KBEI), Tehran, Iran, 2017, pp. 0641-0645.

➢ [2017] **L.Kouhalvandi**, S. Aygun, E. O. Gunes and M. Kirici, "An improved 2 stage opamp with rail-to-rail gain-boosted folded cascode input stage and monticelli rail-to-rail class AB output stage," *2017 24th IEEE International Conference on Electronics, Circuits and Systems (ICECS), Batumi, 2017, pp. 542-545.*

➢ [2017] **L.Kouhalvandi**, S. Aygun, E. O. Gunes and M. Kirici, "Design of a high gain telescopic-cascode operational amplifier based on the ZTC operation condition," *2017 24th IEEE International Conference on Electronics, Circuits and Systems (ICECS), Batumi, 2017, pp. 538-541.*

➢ [2017] **L.Kouhalvandi**, S. Aygun, G. G. Ozdemir and E. O. Gunes, "10-bit High-speed CMOS comparator with offset cancellation technique," *2017 5th IEEE Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE), Riga, 2017, pp. 1-4.*

➢ [2017] **L.Kouhalvandi**, S. Aygun, E.O.Gunes, M. Kirici " Design of a Fully-Differential Double Folded Cascode Class AB Opamp with Continuous Time Common Mode Fedback Network For 12-bit Pipeline ADC Applications, " *2017 2nd International Conference on Computer Science and Engineering UBMK'17, Antalya.*

➢ [2017] **L.Kouhalvandi**, E.O.Gunes, M. Kirici, " Survey of Positive CMOS Second Generation Controlled Current Conveyor (CCCII+) and Macromodel of CCCII+," *2017 International Conference on Engineering and Information Technology (ICET), UAE-Dubai, 2017.*

➢ [2017] B. Meskoob, **L.Kouhalvandi**, and B. S. Yarman, "Block size effect on image compression using SYMPES method," *2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, 2017, pp. 1-4.*

➢ [2016] S. Aygun, E. O. Gunes and **L.Kouhalvandi**, , "Python based parallel application of Knuth-Morris-Pratt algorithm," *2016 IEEE 4th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE), Vilnius, 2016, pp. 1-5.*

➢ [2016] **L.Kouhalvandi**, M. H. Cilasun, and S. Aygun, "Recognition of Apple and Orange Fruit Pictures Based on Boundary Estimation," *2016 3rd International Conference on Recent Innovation in Electrical Engineering and Computer (ICEEC), Tarbiat Modares University, Tehran.*

➢ [2016] **L.Kouhalvandi**, "Reviews of Defect Tolerance for Nano-arrays, " *2016 3rd International Conference on Recent Innovation in Electrical Engineering and Computer (ICEEC), Tarbiat Modares University, Tehran.*

➢ [2016] **L.Kouhalvandi**, and G.Gunes Ozdemir, "Design and Analysis of an Ultra High Speed and Resolution Comparator in 0.18 um CMOS." *2016 3rd National and 1st International Conference on Applied Research in Electrical Engineering (EMME), Malek-Ashtar University of Technology, Tehran.*

- [2015] **L.Kouhalvandi**, S. Paker and H. B. Yagci, "Ku - Band slotted rectangular patch array antenna design," *2015 23nd Signal Processing and Communications Applications Conference (SIU), Malatya, 2015, pp. 447-450.*

- [2014] **L.Kouhalvandi**, "Nano-Technology in Leather Industry." *2014 1st International Conference on Leather Industry, University of Tabriz, Tabriz.*

- [2010] **L.Kouhalvandi**, "What Is A Nano-Transistor?" *2010 National Conference on Innovations In Electronics Science, University of Tabriz, Tabriz.*

7.4. Books or chapters in books (International)

- [2021] **L. Kouhalvandi**, and L. Matekovits, "Multi-objective Optimization Methods for Passive ad Active Devices in mm-Wave 5G Networks "Printed Antennas for 5G Networks", Springer Nature Switzerland AG.

8. Projects

- [2021/2– 2021/7] **Optimization of materials for printed structures in the design of radiating devices** *Funding Agency and Program*: Politecnico di Torino , Turin, Italy.

- [2020–2022] **Advanced Handover Self-Optimization Techniques in Heterogeneous Networks with the Inclusion of 5G, 6G Systems and IoT Technology** *Funding Agency and Program*: TUBITAK; International fellowship for outstanding researchers program (2232) , Turkey.

- [2019] **Optimization for Broadband High Efficiency GaN Power Amplifier Designs** *Funding Agency and Program*: Bilimsel Arastirma Projeleri (BAP) , Istanbul Technical University, Turkey.

- [2018– 2019] **Digital Pre-distortion Design for RF Circuits** *Funding Agency and Program*: 1) NETAS; Telecommunications equipment company , Turkey 2) Bilimsel Arastirma Projeleri (BAP) , Istanbul Technical University, Turkey.

9. Administrative Responsibilities

- [2020], [2021] **Technical Program Committee in The Seventeenth Advanced International Conference on Telecommunications (AICT),** Valencia-Spain.

- [2019] **Chair In a Session Of 8th International Conference on AgroGeoinformatics (Agro-Geoinformatics) and Member Of Running Team In This Conference,** Istanbul-Turkey.

10. Membership for academic or professional organizations

- [2019-2020] EuMA member
- [2017-...] IEEE member

11. Awards

➤ [2021] **Best paper award at 'EExPolytech-2021: Electrical Engineering and Photonics conference'.** 14 - 15 Oct 2021, Saint Petersburg, Russia.

➤ [2021] **PhD Thesis Competition Winner** at PhD Forum Design Automation Conference (DAC) conference, December 13 – January 1, 2022, San Francisco, USA.

12. Undergraduate and graduate courses taught in the last two years (including the summer school program)

Academic Year	Semester	Course Title	Teaching Hours (Weekly)		Number of Students
			Theory	**Practice**	
2021-2022	Fall	Elektrik Makineleri I	3 hours	-	28
		Haberleşmede Gürültü	3 hours	-	35
		Elektrik-Elektronik Mühendisliğine Giriş	3 hours	-	50
		İşaretler ve Sistemler	3 hours	-	21
	Spring				