CV

1. **Name Surname:** Hakan Koyuncu

2. **Birth Date:** July 9, 1986

3. **Title:** Assistant Professor

4. **Address :** Altinbas University, Computer Engineering Dept.
   Istanbul, Turkiye

5. **Mobile number, email:** 0212 604 0100, hakan.koyuncu@altinbas.edu.tr

6. **Education:**

Degree	Department	University	Year
BSc.	Computer Engineering	Atilim University TR	2007
MSc.	Computer Science	Loughborough University UK	2009
PhD.	Computer Science	Loughborough University UK	2015

7. **Academic Titles:**

   Assistant Professorship Duration : 02/08/2016 – present

   Associate Professorship Duration: ------

   Professorship Duration: -------

8. **Managed Master's and Doctoral Theses**

   8.1. Master Theses

   8.2. Doctoral Theses

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9. **Publications**

9.1. Articles published in international refereed journals (SCI & SCI-E)

1) **Hakan Koyuncu,** "Determination of positioning accuracies by using fingerprint localisation and artificial neural networks", Thermal Science, Vol. 23, Issue 1,pp. S99-S100, 2019, doi: 10.2298/TSCI180912334K **(SCI-exp)**

2) **H. Koyuncu, G.S. Tomar, D. Sharma, "**A New Energy Efficient Multitier Deterministic Energy-Efficient Clustering Routing Protocol for Wireless Sensor Networks", Symmetry 2020, 12, 837, doi: 10.3390/sym12050837 **(SCI-exp)**

3) **H. Koyuncu, A. Bagwari, G.S. Tomar,** "Simulation of a Smart Sensor Detection Scheme for Wireless Communication Based on Modeling", Electronics , 2020, 9(9), 1506. doi:10.3390/electronics9091506 **(SCI-exp)**

9.2. Articles published in other international refereed journals

1) **H.Koyuncu and Shuang Hua Yang,** "A survey of Indoor Positioning and object locating systems" ,international Journal of Computer Science and Network Security, Vol. 10, No. 5, pp 121-128 ,ISSN 1738-7906, May 2010

2) **H.Koyuncu and Shuang Hua Yang,** "A 2D positioning system using WSNs indoor environment " International Journal of Electrical & Computer sciences, Vol. 11, No. 03, pp 70-77,ISSN 2077-1231, June 2011

3) **H.Koyuncu and Shuang Hua Yang,** "A study of indoor positioning by using trigonometric and weight centroid localisation techniques", International Journal of computer Engineering Research, Vol. 2(2), ISSN 2141-6474, Sept 2011

4) **H.Koyuncu and Shuang Hua Yang**, "Comparisons of Indoor Position Enhancements by Using Mean and Kalman Filtering Techniques", Journal of computer science and engineering, Vol. 11, issue 2, pp 9- 15, ISSN 2043-9091, February 2012.

5) **H.Koyuncu and A.Cevik,** "Indoor localisation by using particle Filtering Approach with Wireless Sensor Nodes", Journal of communication software and systems, Vol. 9, No. 1,. pp 74- 83, ISSN 1845-6421/03/8283, March 2013

6) **H.Koyuncu and Shuang Hua Yang**, "Virtual 2D positioning System by using Wireless Sensors in indoor environment", International Journal of Wireless and mobile networks (IJWMN), Vol. 5,No. 6 , pp 21 -36, ISSN 0975-3834, December 2013

7) **H.Koyuncu and Shuang Hua Yang,** "An improved adaptive localisation approach for indoor positioning by using environmental thresholds with wireless sensor nodes", IET Wireless sensor systems, ISSN:2043-6386, IEEExplore, 2014

8) **H.Koyuncu and B.Koyuncu, "**A Real Time Application of Active RFIDs in Multicar Environment for Road Safety", Int. Journal of Research studies in Computer science and engineering, IJRSCSE, Vol 2, Issue 9, pp 24 – 28, ISSN 2349-4859, September 2015

9) **B.Koyuncu and H.Koyuncu, "**A precision Motion control of a circular platform by Using Stepper Motors", Int. Journal of Electronics Communication and computer Engineering, IJECCE, Vol 6, Issue 5, pp 508-601, ISSN 2249–071X, 2015

10) **H.Koyuncu and B.Koyuncu, "**Intelligent Front desk hotel management", Int. Journal of Artificial Intelligence and agent technology, IJAIAT,Vol 3, Issue 2, pp 101 , ISSN 2347-8144, 2016

11) **B.Koyuncu, E.Labranche and H.Koyuncu**, "Magnifying Small Image Areas by using an Image zooming technique", Journal of Environmental Science, Computer Science and Engineering and Technology, JECET, E-ISSN 2278-179X Section A, Vol 5, No 2, pp 1-7, 2016

12) **H.Koyuncu and B.Koyuncu , "**Adaptive Indoor localization by using Environmental Thresholding and Virtual Fingerprint Technique", International Journal of Engineering research and Applications (IJERA),Vol 6,issue 12, part 1, pp 86-91, 2016

13) **H.Koyuncu and B.Koyuncu** , "Environmentally corrected RSSI based real time location detection system", International Journal of computer science and information technology,(IJCST),

Vol 8, No 6 , pp 39-48, 2016

14) **H.Koyuncu and B.Koyuncu**, **"**An application of Kalman Filtering and Artificial Neural Network with K-NN position detection technique" ,Wireless Sensor Networks (WSN) , ISSN Online: 1945-3086, 2017, vol 9 , No 8, pp 239-249

15) **H.Koyuncu and B.Koyuncu**, "Vehicle Speed detection by using camera and image processing software", The International Journal of Engineering and Science (IJES), Vol 7, Issue 9,pp 64-72, 2018, DOI:10.9790/1813-0709036472

16) **B. Koyuncu and H. Koyuncu**, "Handwritten Character Recognition by using Convolutional Deep Neural Network; Review", International Journal of Engineering Technologies (IJET), Vol. 5, No. 1, pp. 1-5, 2019

17) **H.Koyuncu, B. Gunduz, B.Koyuncu**, **"**Construction of 3D Soil Moisture Maps in Agricultural Fields by Using Wireless Sensor Communication", Gazi University Journal of Science , 34 (1) , 84-98 . DOI: 10.35378/gujs.720778

18) **H.koyuncu, M. Dixit, B. Koyuncu**, "A Review of Content Based Image Retrival ", International Advanced Researches And Engineering Journal

9.3. Papers presented at international scientific meetings and published in the proceedings book

1) **H.Koyuncu and Shuang Hua Yang,** "Determination of 3D indoor object locations by using wireless sensor nodes and RSSI techniques", Proceedings of 16th international conference on Automation & Computing, University of Birmingham, UK,11 pp 37-41, ISBN 978-0-9555293-6-8, September 2010

2) **H.Koyuncu and Shuang Hua Yang,** "Comparisons of Indoor localization techniques by using reference nodes and weighted k-NN algorithms", 3rd European conference of computer science, pp 46-51, ISBN 978-1-61804-140-1, December 2012

3) **H.Koyuncu and Shuang Hua Yang,** "Indoor Positioning with Virtual Fingerprint mapping by using linear and exponential taper functions", IEEE International conference on Systems, Man and Cybernetics (CSMC) ,IEEE Proceedings, pp. 1052 - 1057, ISSN 978-1-4799-0652-9, October 2013

4) **H.Koyuncu and Shuang Hua Yang,** "Improved Fingerprint localization by using static and dynamic segmentation" International Conference on Computational Science and Computational Intelligence (CSCI'14), IEEE CPS proceedings, Las Vegas USA, pp. 149 – 156, March 2014,

5) **B.Koyuncu, H.Koyuncu, T.Celik and S.Varlıoglu**, "Distance calculations by using Bi-section algorithm with RFID signals", Int. conference on advances in engineering sciences and applied mathematics (ICAESAM'15), pp 87 – 90 , London ,UK, ISBN 978-93-84422-12-7, March 2015

6) **B. Koyuncu and H. Koyuncu**, "Intelligent Hospital Management System (IHMS)" , 7th Int. Conference on Computational Intelligence and communication networks, CICN 2015, ISBN 978-1-5090-0076-0/15, IEEE, pp1601-1604, 2015

10. Projects

   11.1 Position detection in real time by using GPS +GSM + GPRS networks.

11.2 localization of vehicas in a open air car park by using GPS and RFID devices.

11.3 Indoor Position detection by using adaptive cooperative location algorithm

11.4 Landmark position detection by using RFID and reference point techniques

11.5 RFID data selection by using Chebbuchev and Elliptic filtering techniques

11.6 3D position detection by using std, kalman and linear position data

11.7 Position detection by using RFID wireless communication networks

11.8 Using regression analysis to determine knn and weight algorithms

11.9 Automatic product selection and payment by using RFID in supermarkets

11 10 RFID Position detection by using segmentation algorithms

11.11 RFID position detection with virtual fingerprint by using exponential signals

11.12 3D virtual viewer on mobile devices using RFID position data

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11. Administrative Duties

- Loughborough University (UK)
  Examination Oversight in Computer Engineering
  Department representation duty at the university.
  Laboratory assistant in the department
  Duties of Department R&D presentation at the Faculty.
- Chairman of Computer Engineering Department at International Final University Cyprus
  Departmental courses distribution among academic staff
  Student counseling in the department.
  Computer society counseling at International Final University.
  Civil Defense coordinator of Int. Final University in North Cyprus government.
- Deputy Director of Scientific Research Center in Gelişim University,Turkey

- Deputy Director of Technology Transfer Office in Gelişim University,Turkey

- Vice Chairmen of Computer Engineering department in Istanbul Gelisim University

12. Scientific and Professional Activities

CICN 2017 Technical Committee member.

CSNT 2014 Program Committee member

13. Awards

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14. Undergraduate and Graduate courses taught in the last four years

Academic Year	Semester	Course Name	Weekly Hours		Student Number
			Theory	Practice	
2016 - 2017	Fall	Computer programming 1 (CE)	3	2	10
		Computer programming 1 (EE)	3	2	3
	Spring	Computer programming 2 (CE)	3	2	7
		Computer programming 2 (EE)	3	2	4
2017- 2018	Fall	Introduction to Computer Programming (CE)	3	2	45
		Engineering Software (CE)	3	0	31
		Undergraduate Project I (CE)	6	0	4
	Spring	Network Technologies (CE)	2	2	34
		Introduction to Computer Programming (CE)	2	2	46
		Undergraduate Project II (CE)	6	0	4
		Mobile Communication and Wireless Networks (CE)	3	0	16
		Software Engineering (CE)	4	0	48
2018 - 2019	Fall	Mobile Communication and Wireless Networks (CE)	3	0	22
		Mobile Communication and Wireless Networks (ME)	3	0	1
		Introduction to Computer Programming (EE)	2	2	26
		Computer Programming I (CE)	2	2	69
		Undergraduate Project (CE)	0	2	4
	Spring	Network Technologies (CE)	2	2	39
		Introduction to Computer Programming (IE)	2	2	56
		Matlab Programming (EE)	0	2	66
		Undergraduate Project (CE)	0	2	5
2019-2020	Fall	Network Design (MIS)	3	0	30
		Computer Programming I (CE)	2	2	52
		Engineering Software (CE)	3	0	20
		Computer Programming (BIM)	3	0	30
		Undergraduate Project (CE)	0	2	5
	Spring	Computer Programming II (sec. 1) (CE)	2	2	71
		Computer Programming II (sec. 2) (CE)	2	2	71