



## EDUCATIONAL INFORMATION

Degree	University	Department	Year(s)
Doctoral Degree	Loughborough University		2009 - 2015
Master's Degree	Loughborough University {england}		2008 - 2009
Bachelor's Degree	Atilim University	Department of Computer Engineering	2003 - 2007

## RESEARCH AREAS

## ACADEMIC DUTIES

Duty	University	Area	Year(s)
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## ADMINISTRATIVE DUTIES

Duty	University	Year(s)
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## ACADEMIC AND PROFESSIONAL MEMBERSHIPS

Organisation	Membership	Year(s)
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## NON-UNIVERSITY EXPERIENCE

Country	Organisation	Duty	Year(s)
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## BOOKS

## ARTICLES

**A Novel Deep Learning Framework Enhanced by Hybrid Optimization Using Dung Beetle and Fick's Law for Superior Pneumonia Detection**

SABAAWI ABDULAZEEZ MOHAMMED IBRAHIM,KOYUNCU HAKAN

Electronics, 2024

[International](#) DOI: 10.3390/electronics13204042

**Novel Hybrid Optimization Techniques for Enhanced Generalization and Faster Convergence in Deep Learning Models: The NestYogi Approach to Facial Biometrics**

ALTAHER RAOOF HAYDER RAOOF,KOYUNCU HAKAN

Mathematics, 2024

[International](#) DOI: 10.3390/math12182919

**Catalyzing Healthcare Advancements: Integrating IoT-Driven Smart Systems and Deep Learning for Precision Breast Cancer Detection in Telemedicine**

Patel Warish,Ganatra Amit,KOYUNCU HAKAN

Revue d'Intelligence Artificielle, 2024

[International](#) DOI: 10.18280/ria.380428

**Optimization Strategies for Atari Game Environments: Integrating Snake Optimization Algorithm and Energy Valley Optimization in Reinforcement Learning Models**

SARKHI SADEQ MOHAMMED KADHIM,KOYUNCU HAKAN

AI, 2024

[International](#) DOI: 10.3390/ai5030057

## ARTICLES

### **Effective Audio and Video-Based Learning for Youngest Age**

Akram Basmal Omer,KOYUNCU HAKAN

Journal of Electrical Systems, 2024

**International** DOI: 10.52783/jes.2590

### **Empowering Health and Well-being: IoT-Driven Vital Signs Monitoring in Educational Institutions and Elderly Homes Using Machine Learning**

Duodu Nana Yaw,Patel Warish,KOYUNCU HAKAN,Nartey Felix,Torgby Wisdom

International Journal of Electrical and Electronics Research (IJEER), 2024

**International** DOI: 10.37391/ijeer.12bdf07

### **Hybrid Neural Network Approach for Tea Leaf Disease Detection Using Pelican and Mayfly Optimization Algorithms**

AL-KARAWI SAJA,KOYUNCU HAKAN

Jurnal Riset Informatika, 2024

**International** DOI: 10.34288/jri.v6i2.274

### **Merging Two Models of One-Dimensional Convolutional Neural Networks to Improve the Differential Diagnosis between Acute Asthma and Bronchitis in Preschool Children**

SALİH WALEED HAMEED SALİH,KOYUNCU HAKAN

Diagnostics, 2024

**International** DOI: 10.3390/diagnostics14060599

### **A Hybrid Ensemble Learning Approach for Efficient Diabetic Retinopathy Prediction and Classification Using Machine Learning and Deep Learning Techniques**

Shah Arpit,Patel Warish,KOYUNCU HAKAN

International Journal of Intelligent Systems and Applications in Engineering, 2024

**International**

### **Enhancing SDN Anomaly Detection: A Hybrid Deep Learning Model with SCA-TSO Optimization**

ALHILO AHMED MOHANAD JABER,KOYUNCU HAKAN

International Journal of Advanced Computer Science and Applications, 2024

**International** DOI: 10.14569/IJACSA.2024.0150551

### **Empowering healthcare innovation : IoT-enabled smart systems and deep learning for enhanced diabetic retinopathy in the telehealth landscape**

Shah Arpit,Patel Warish,KOYUNCU HAKAN

Journal of Interdisciplinary Mathematics, 2024

**International** DOI: 10.47974/JIM-1836

### **Deep Learning and Grey Wolf Optimization Technique for Plant Disease Detection: A Novel Methodology for Improved Agricultural Health**

JABBAR AMENAH NAZAR JABBAR, KOYUNCU HAKAN

Traitement du Signal, 2023

**International** DOI: 10.18280/ts.400515

### **Intelligence feeder system for stray cats**

Saadoon Alaa Mohsin,KOYUNCU HAKAN

Indonesian Journal of Electrical Engineering and Computer Science, 2023

**International** DOI: 10.11591/ijeecs.v31.i3.pp1507-1514

### **Optimizing Multi Neural Network Weights for COVID-19 Detection Using Enhanced Artificial Ecosystem Algorithm**

KOYUNCU HAKAN, Arab Munaf

Traitement du Signal, 2023

**International** DOI: 10.18280/ts.400417

### **Deep learning approach to analyse, detect and classify COVID-19 patients**

Sharma Dinesh,KOYUNCU HAKAN

New Trends in Mathematical Science, 2021

**International** DOI: 10.20852/ntmsci.2021.420

## ARTICLES

### **Accuracy Improvements of Local GPS Coordinates Measured with LEA -6 GPS Receiver Modules by Using Software Techniques**

KOYUNCU BAKİ, KOYUNCU HAKAN

International Journal of Applied Physics, 2021

International

### **A Comparative Study of Handwritten Character Recognition by using Image Processing and Neural Network Techniques**

KOYUNCU HAKAN

Hittite Journal of Science & Engineering, 2021

National DOI: 10.17350/HJSE19030000223

### **An analysis of content-based image retrieval**

KOYUNCU HAKAN, Dixit Manish, KOYUNCU BAKİ

International Advanced Researches and Engineering Journal, 2021

National DOI: 10.35860/iarej.811927

### **Construction of 3D Soil Moisture Maps in Agricultural Fields by Using Wireless Sensor Networks**

KOYUNCU HAKAN, Gündüz Burak, KOYUNCU BAKİ

GAZI UNIVERSITY JOURNAL OF SCIENCE, 2021

International DOI: 10.35378/gujs.720778

### **Simulation of a Smart Sensor Detection Scheme for Wireless Communication Based on Modeling**

KOYUNCU HAKAN, Bagwari Ashish, Tomar Geetam S.

Electronics, 2020

International DOI: 10.3390/electronics9091506

### **A New Energy Efficient Multitier Deterministic Energy-Efficient Clustering Routing Protocol for Wireless Sensor Networks**

KOYUNCU HAKAN, Tomar Geetam S., Sharma Dinesh

Symmetry, 2020

International DOI: 10.3390/sym12050837

### **Handwritten character recognition by using convolutional deep neural network review**

KOYUNCU BAKİ, KOYUNCU HAKAN

International journal of engineering technologies-IJET, 2019

International

### **Handwritten Character Recognition by using Convolutional Deep Neural Network; Review**

KOYUNCU BAKİ, KOYUNCU HAKAN

International Journal of Engineering Technologies, 2019

International

### **Determination of positioning accuracies by using fingerprint localisation and artificial neural networks**

KOYUNCU HAKAN

Thermal Science, 2018

International DOI: 10.2298/TSCI180912334K

### **Vehicle Speed detection by using Camera and image processing software**

KOYUNCU HAKAN, KOYUNCU BAKİ

The International Journal of Engineering and Science, 2018

International DOI: 10.9790/1813-0709036472

### **An application of Kalman Filtering and Artificial Neural Network with K-NN Position Detection Technique**

KOYUNCU HAKAN, KOYUNCU BAKİ

Scientific Research Publishing, Inc., 2017

International DOI: 10.4236/wsn.2017.98013

### **Adaptive Indoor Localization by using Environmental Thresholding and Virtual Fingerprint Technique**

KOYUNCU HAKAN, KOYUNCU BAKİ

International Journal of Engineering Research and Application, 2016

International

## ARTICLES

### **Environmentally Corrected RSSI Based Real Time Location Detection System**

KOYUNCU HAKAN,KOYUNCU BAKİ

International Journal of Computer Science and Information Technology, 2016

International DOI: 10.5121/ijcsit.2016.8604

### **A Real Time Application of Active RFIDs in Multicar Environment for Road Safety**

KOYUNCU HAKAN,KOYUNCU BAKİ

International Journal of Research Studies in Computer Science and Engineering, 2015

International

### **Improved adaptive localisation approach for indoor positioning by using environmental thresholds with wireless sensor nodes**

KOYUNCU HAKAN,Yang Shuang Hua

IET Wireless Sensor Systems, 2015

International DOI: 10.1049/iet-wss.2013.0100

### **Virtual 2D Positioning System by Using Wireless Sensors in Indoor Environment**

KOYUNCU HAKAN,Yang Shuang Hua

International Journal of Wireless & Mobile Networks (IJWMN), 2013

International DOI: 10.5121/ijwmn.2013.5602

### **Indoor Localization by using Particle Filtering Approach with Wireless Sensor Nodes**

KOYUNCU HAKAN,ÇEVİK AHMET

Journal of Communications Software and Systems, 2013

International DOI: 10.24138/jcomss.v9i1.159

### **A study of indoor positioning by using trigonometric and weight centroid localization techniques**

KOYUNCU HAKAN,Yang Shuang Hua

International Journal of Computer Engineering Research, 2011

International

### **A 2D positioning system using WSNs in indoor environment**

KOYUNCU HAKAN,Yang Shuang Hua

International Journal of Electrical & Computer Sciences, 2011

International

### **A Survey of Indoor Positioning and Object Locating Systems**

KOYUNCU HAKAN,Yang Shuang Hua

International Journal of Computer Science and Network Security, 2010

International

## PROCEEDINGS

### **Optimizing MIMO-OFDM Communication Systems: A Comparative Analysis of LMMSE and LZF Equalizers under Varying Antenna Configurations**

AL-ANBAGI SARHA ABDULWAHHAB ABD.AL,KOYUNCU HAKAN

AICCONF '24: Cognitive Models and Artificial Intelligence Conference, 2024

International

### **Security threat analysis and countermeasure using ML in cloud**

Kushwaha Akhilesh,Patel Warish,KOYUNCU HAKAN,Parikh Swapnil,Chauhan Ankit

5th Parul University International Conference on Engineering and Technology PiCET-2023, 2024

International

### **A comprehensive survey of predicting stock market prices: An analysis of traditional statistical models and machine-learning techniques**

Patel Divy,Patel Warish,KOYUNCU HAKAN

5th Parul University International Conference on Engineering and Technology PiCET-2023, 2024

International

## PROCEEDINGS

### Energy Consumption Analysis Via Different Machine Learning Algorithms

DARWESH RWAN,KOYUNCU HAKAN

International Conference on Computer Science, Machine Learning and Big Data(ICCSMLBD)(WRFASE International Conference), 2023

International

### Revolutionizing Cancer Diagnosis in IoMT with a Novel Lightweight Deep Learning Model for Histopathological Image Classification

Patel Warish,KOYUNCU HAKAN,Ganatara Amit

2023 International Conference on Modeling, Simulation & Intelligent Computing (MoSiCom), 2023

International

### Deep Fake Detection Using LSTM, Resnetv2, OpenCV and Genetic Algorithm

AHMED OSMAN TARIG OSMAN,KOYUNCU HAKAN

International Conference on Electronics, Artificial Intelligence & Robotics(ICEAIR), 2023

International

### A Deep Learning Approach to Differentiate Between Acute Asthma and Bronchitis in Preschool Children

SALİH WALEED HAMEED SALİH,KOYUNCU HAKAN

2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 2022

International

### Hand Gesture Recognition for Interactive Media Player Using CNN and Image Classification

AL MOHAMMEDI ANWAR DIYAA AWAD,KOYUNCU HAKAN

2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 2022

International

### Obstacle Avoidance in Unmanned Aerial Vehicles Using Image Segmentation and Deep Learning

OBAID AMRO ALI,KOYUNCU HAKAN

2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 2022

International

### Intelligent Hospital Management System (IHMS)

KOYUNCU BAKİ, KOYUNCU HAKAN

2015 International Conference on Computational Intelligence and Communication Networks, 2015

International

### Distance Calculation by Using Bi-Section Algorithm with RFID Signals

KOYUNCU BAKİ,KOYUNCU HAKAN,ÇELİK Taner,VARLIOĞLU Sefika

3rd International Conference on Advances in Engineering Sciences & Applied Mathematics (ICAESAM'2015), 2015

International

### Improved Fingerprint Localization by Using Static and Dynamic Segmentation

KOYUNCU HAKAN,Yang Shuang Hua

2014 International Conference on Computational Science and Computational Intelligence, 2014

International

### Indoor Positioning with Virtual Fingerprint Mapping by Using Linear and Exponential Taper Functions

KOYUNCU HAKAN,Yang Shuang Hua

2013 IEEE International Conference on Systems, Man, and Cybernetics, 2013

International

### Comparison of Indoor localization techniques by using reference nodes and weighted k-NN algorithms

KOYUNCU HAKAN,Yang Shuang Hua

Recent Advances in Information Science (Proceedings of the 3rd European Conference of Computer Science (ECCS '12)), 2012

International

## PROCEEDINGS

**Determination of 3D indoor object locations by using Wireless Sensor Nodes and RSSI techniques**

KOYUNCU HAKAN, Yang Shuang Hua

16th International Conference on Automation & Computing, 2010

International

## PROJECTS

## THESIS SUPERVISION

## COURSES

Course Type	Course Code	Course Name
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## PERSONAL INFORMATION

### CONTACT INFORMATION

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