PERSONAL INFORMATION

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♂ **Sex** Male | **Date of birth** 21/10/1985 | **Nationality** Iraqi, Turkish

URL: https://www.izu.edu.tr/akademisyen?id=80887

WORK EXPERIENCE

July 2019 - To Date
Assistant Professor

Department of Computer Engineering, Istanbul Sabahattin Zaim University, Istanbul, Turkey
- Teaching graduate and under-graduate courses
- Conduct research
- Applying for funded projects
- Department coordinator for Erasmus and Mevlana exchange programs.

Sep 2017- June 2019
Assistant Professor

Department of Computer Engineering, Istanbul Aydin University, Istanbul, Turkey
- Teaching graduate and under-graduate courses
- Conduct research
- Applying for funded projects

July 2016 – April 2017
Research Scholar

Department of Computer Engineering, Selcuk University, Istanbul, Turkey

I have developed two new machine learning methods by deriving a new adaptive momentum back-propagation (BP) as supervised algorithm and a robust adaptive learning approach of self-organizing maps as unsupervised algorithm. Additionally, I have written research papers related to these methods and published them in the top journals and conferences.

EDUCATION AND TRAINING

2019– 2021
Post-Doctoral in Computer Engineering

Institution : Department of Computer Engineering, Istanbul University, Istanbul, Turkey

2012 – 2017
PhD in Computer Engineering

Thesis Title: Robust Adaptive Learning Approach of Artificial Neural Networks.

Institution : Department of Computer Engineering, Selcuk University, Konya, Turkey
Courses: Biomedical Pattern Recognition, Machine Learning, Feature Generation and Processing Methods, Metaheuristic Algorithms, Biometric Recognition Methods, Data Processing Techniques, Advance Image Processing and Its Applications.

2009-2012
Masters in Computer Engineering (MS)

Thesis Title: Real-Time Noise Cancellation Using Adaptive Algorithms.

Institution: Department of Computer Engineering, Eastern Mediterranean University, Turkey

Courses: Personal Wireless Communications, Evolutionary Multi-Objective Optimization, Advance Digital Signal Processing, Non-Linear Processing, Mathematical Methods for Engineers and scientists-II, Knowledge

Engineering, Cryptography and Network Security.

2004 - 2009   **Bachelor of Science in Computer Engineering Techniques (BS)**

Institution: Department of Computer Engineering, Al Mamon University, Baghdad, Iraq
Main Courses: Computer Programming, Object Oriented programming, Software Engineering, Algorithms and Data Structures, Networking, Database Management System, Operating Systems, Linear Algebra, Calculus.

PROJECTS

1   **Title: UAV Based Intelligent System to Identify and Deal with Terrorism & Known/Unknown Threats**
Submitted to: H2020-SU-SEC-2020, EUROPA - European Union.
Status: Under review
Objectives: The main objective of this project is the application of inexpensive unmanned aerial vehicles (UAV) to detect threats that can help law enforcement agencies prevent the threats and make better decisions.

2   **Title: UAV and Suitable for Prevention and Control of Virus Spread Intelligent System Using Sensors.**
Submitted to: COVID-19 Response and Resilience Program, Govt. of Turkey.
Status: Under review
Objectives: The main objective of the proposed project to design an intelligent system to help combat and control COVID-19 in Turkey. Its focus is on detection and prediction of the cases and how to use technology to prevent its spread.

3   **Title: Fake news detection using artificial intelligence approaches**
Submitted to:
Status: Under review
Objectives: The availability of the internet and technology has also allowed it to be exploited to deceive or mislead people. The main aim is to detect fake news using artificial intelligence techniques from social media. It predicts the probability of the news being fake and assigns a score to the news.

CERTIFICATES

- English for Postgraduate Students (ENGL515) In Eastern Mediterranean University: 2010/2011.

- Turkish language (TÖMER): 2012/2013.

AWARDS AND HONORS

- Postdoctoral Fellowship, Istanbul University (2019- 2020)

- Turkish Government Scholarship for PhD (2014- 2018)

PROFESSIONAL ACTIVITIES

Reviewer for Journals   Knowledge-Based Systems

Circuits, Systems, and Signal Processing

Journal of Experimental and Theoretical Artificial Intelligence

Program Committee   1st International Conference on Computing and Machine Intelligence (ICMI-2021), Istanbul, Turkey, February 19-20, 2021.

5th Mediterranean Conference on Pattern Recognition and Artificial Intelligence, MedPRAI 2021, Istanbul, Turkey, December 22–23, 2021.

Applied Research international conference on Millennial Technology Challenges (ARICMTC), Istanbul, Turkey, March 28–29, 2019.

Applied Research International Conference (ARICMTC), Istanbul, Turkey, September 22–23, 2018.

Reviewer for Conferences   5th Mediterranean Conference on Pattern Recognition and Artificial Intelligence, MedPRAI 2021, Istanbul,

Turkey, December 22–23, 2021.

Applied Research International Conference on Science (ARICSED 2020), Istanbul, Turkey, November 20–22, 2020.

International Congress on Human-Computer Interaction, Optimization and Robotic Applications, Nevşehir, Turkey, July 05 - 07, 2019.

PERSONAL SKILLS

Mother tongue(s)	Arabic			
Other language(s)	LISTENING	READING	SPEAKING	WRITING
English	Proficient	Proficient	Proficient	Proficient
Turkish	Proficient	Proficient	Proficient	Proficient

Technical Skills

Programming: C#, C / C++, Java, Python, SQL, Android

IoT/Big Data Tools: Raspberry Pi, Arduino, Apache Hadoop, Apache Spark

Libraries/Frameworks: RapidMiner, MATLAB, Tensorflow, Keras, Pytorch

Web Programming : ASP.NET, HTML, CSS, JavaScript, Bootstrap, JQuery

IDE: Visual Studio, Eclipse, Netbeans, R Studio, Raspbian, Arduino

Hobbies

Scouting and Volunteering

Play Guitar (Beginner)

Play Table Tennis, Volleyball and Football

PUBLICATIONS

Journal Articles

1. Mohammad Shukri Salman, **Alaa Ali Hameed** and Bekir Karlik, "Convex combination of recursive inverse algorithms," Turkish Journal of Electrical Engineering and Computer Science, 2013.
2. **Alaa Ali Hameed**, Bekir Karlik and Mohammad Shukri Salman, "Back-propagation algorithm with variable adaptive momentum", Knowledge-Based Systems, 2016.
3. Naim Ajlouni, **Alaa Ali Hameed** and Firas Ajlouni, "Improving DBMS Security through the use of a Checksum Technique", International Journal of Computer Science and Information Security, 2017.
4. **Alaa Ali Hameed**, Bekir Karlik, Mohammad Shukri Salman and Gülden Eleyan, "Robust adaptive learning approach of self-organizing maps", Knowledge-Based Systems, 2019.
5. **Alaa Ali Hameed**, Naim Ajlouni, Zeynep Orman, Adem Özyavaş, "Investigating the Effectiveness of Adaptive Step Size LMS Algorithms for the Use with VOIP Applications", Electrica, 2020.
6. Jawad Rasheed, Akhtar Jamil, **Alaa Ali Hameed**, Usman Aftab, Javaria Aftab, Syed Attique Shah, Dirk Draheim, "A survey on artificial intelligence approaches in supporting frontline workers and decision makers for the COVID-19 pandemic", Chaos, Solitons & Fractals, 2020.
7. Jawad Rasheed, **Alaa Ali Hameed**, Chawki Dejeddi, Akhtar Jamil, Fadi Al-Turjman, "A Machine Learning-based framework for diagnosis of COVID-19 from Chest X-ray Images", Interdisciplinary Sciences: Computational Life Sciences, 2020.
8. Jawad Rasheed, **Alaa Ali Hameed**, Chawki Dejeddi and Akhtar Jamil, "An artificial intelligence-based framework for identification of COVID-19 disease", Expert Systems. (2021).
9. Jawad Rasheed, Akhtar Jamil, **Alaa Ali Hameed**, and Fadi Al-Turjman, " COVID-19 in the Age of Artificial Intelligence: A Comprehensive Review", Interdisciplinary Sciences: Computational Life Sciences, 2021.
10. Akhtar Jamil, Aftab Ahmed khan, **Alaa Ali Hameed**, Sibghat Sibghat Ullah Bazai, Land Cover Classification using Machine Learning Approaches from High Resolution Images, Journal of Applied and Emerging Sciences, 2021.
11. **Alaa Ali Hameed**, Mohammad Shukri Salman, "Analysis of convexly combined recursive inverse algorithms", International Journal of Adaptive Control and Signal Processing (under review).
12. **Alaa Ali Hameed**, Naim Ajlouni and Adem Özyavaş, "Investigating the effectiveness of a BP with Variable Adaptive Momentum Compared to Conventional BP Algorithm", Network: Computation in Neural

Systems (under review).

13. **Alaa Ali Hameed**, Akhtar Jamil, "An improved novel self-organizing map based on sparse learning". IEEE Transactions on Neural Networks and Learning System, (Under Review).

14. Akhtar Jamil, Aftab Khan, Dostdar Hussain, Imran Ali, and **Alaa Ali Hameed**, "Deep Learning-based Framework for Monitoring of Debris-Covered Glacier from Remotely Sensed Images", Journal of Applied Remote Sensing (JARS), (Under Review).

Articles (In-writing / work-in-progress)

1. **Hameed, A.A.**, Jamil, A.: Text detection in last decade. (Tentative Submission: Journal of Computational Science).

2. Jamil, A., **Hameed, A.A.**, Al-Turjman, F.: Deep learning based Turkish video indexing and retrieval system. (Tentative Submission: Computer Vision and Image Understanding).

3. Sleaman, W., **Hameed, A.A.**:Skin cancer diagnosis using deep fused features based on advance deep learning technique. (Tentative Submission: Medical Hypotheses)

4. **Hameed, A.A.**, Jamil, A.: 2-Dimensional spare variable stepsize LMS based on PSO optimization. (Tentative Submission: Signal, Image and Video Processing)

5. **Hameed, A.A.**, Jamil, A.: Hybrid Meta-heuristic algorithm for sparse adaptive filters (Tentative Submission: Digital Signal Processing)

6. Sleaman, W., **Hameed, A.A.**: Improved adaptive RNN using advance learning Adam optimizer (Tentative Submission: Applied Intelligence).

Conference Papers

1. **Alaa Ali Hameed**, Mohammad Shukri Salman and Bekir Karlik,"A New 2-D Convex Combination of Recursive Inverse Algorithms", 2014 IEEE 34th International Scientific Conference on Electronics and Nanotechnology (ELNANO), 2014.

2. Mohammad Shukri Salman, **Alaa Ali Hameed**, Cemil Turan and Bekir Karlik, "A New Sparse Convex Combination of ZA-LLMS and RZA-LLMS Algorithms", 2015 23nd Signal Processing and Communications Applications Conference (SIU). IEEE, 2015.

3. **Alaa Ali Hameed** and Wisam Husam, "A Complexity and Efficiency of Adaptive Momentum on Back-Propagation Algorithm", 3rd Global Summit and Expo on Multimedia and Artificial Intelligence, 2017.

4. **Alaa Ali Hameed**, Kaveh Dehghanian, Saed Moghimi, Naim Ajlouni, "A Comparative Study on Signal processing of Accelerated Time Histories", Applied Research International Conferences (ARICON), 2018.

5. **Alaa Ali Hameed**, Naim Ajlouni,Kaveh Dehghanian, Saed Moghimi, Adem Özyavaş, "Sonar Signals Discrimination Using BPVAM Algorithm", Applied Research International Conferences (ARICON), 2018.

6. Naim Ajlouni, **Alaa Ali Hameed**, Kaveh Dehghanian, Saed Moghimi, Adem Özyavaş, "Design of a Genetically Fuzzy mapped Swarms PID Controller for UAV", Applied Research International Conferences (ARICON), 2018.

7. Metin Zontul, Ferdi Sönmez, Naim Ajlouni, **Alaa Ali Hameed**, "Customer Credit Rating Estimation By Using Machine Learning Methods", Applied Research International Conferences (ARICON), 2018.

8. **Alaa Ali Hameed** and Naim Ajlouni, "Robust Adaptive SOMs Challenges in a Varied Datasets Analytics", International Workshop on Self-Organizing Maps, 2019.

9. **Alaa Ali Hameed**, Naim Ajlouni, Adem Özyavaş, Zeynep Orman, and Ali Güneş, "An Efficient Medical Diagnosis Algorithm Based on a Hybrid Neural Network with a Variable Adaptive Momentum and PSO Algorithm", HORA2019.

10. Naim Ajlouni, **Alaa Ali Hameed**, Ali Güneş, Adem Özyavaş and Zeynep Orman, "The Use of a Robust-Adaptive Self Organizing Map to Enhance the Prediction Performance of Clinical Dataset", HORA2019.

11. Naim Ajlouni, **Alaa Ali Hameed**, Zeynep Orman and Adem Özyavaş, "Investigating the Performance of Robust Adaptive SOM against Conventional and Modified SOM Algorithms", Communications Faculty of Sciences University of Ankara Series A2-A3 Physical Sciences and Engineering (Conference date: Oct. 26, 2019).

12. Jawad Rasheed, **Alaa Ali Hameed**, Naim Ajlouni, Akhtar Jamil, Adem Özyavaş, Zeynep Orman, "Application of Adaptive Back-Propagation Neural Networks for Parkinson's Disease Prediction", International Conference on Data Analytics for Business and Industry, 2020.

13. Jawad Rasheed, Akhtar Jamil, **Alaa Ali Hameed**, Muhammad Ilyas, Adem Özyavaş, Naim Ajlouni, "Improving Stock Prediction Accuracy Using CNN and LSTM", International Conference on Data Analytics for Business and Industry, 2020.

14. **Alaa Ali Hameed**, Akhtar Jamil, Naim Ajlouni, Jawad Rasheed, Adem Özyavaş, Zeynep Orman, "Classification of Epileptic Seizures using Artificial Neural Network with Adaptive Momentum", International Conference on Data Analytics for Business and Industry, 2020.

15. Hasibe Busra Dogru, Sahra Tilki, Akhtar Jamil, **Alaa Ali Hameed**, "Deep Learning-Based Classification

of News Texts Using Doc2Vec Model", 2021 1st International Conference on Artificial Intelligence and Data Analytics (CAIDA). IEEE, 2021.

16. Mustafa Takaoğlu, Naim Ajlouni, Adem Ozyavas, **Alaa Ali Hameed**, "Blockchain Based National Donation Chain Project", International Symposium of Scientific Research and Innovative Studies, 2021.

17. Hasibe Busra Dogru, **Alaa Ali Hameed**, Sahra Tilki, Akhtar Jamil, "Comparative Analysis of Deep Learning and Traditional Machine Learning Models for Turkish Text Classification", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

18. Sahra Tilki, Hasibe Busra Dogru, **Alaa Ali Hameed**, Akhtar Jamil, Jawad Rasheed, Erdal Alimovski, "Gender Classification using Deep Learning Techniques", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

19. Abdulkadir Şahiner, **Alaa Ali Hameed**, Akhtar Jamil, "Identifying Pneumonia in SARS-CoV-2 Disease from Images using Deep Learning", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

20. Merve Gün, **Alaa Ali Hameed**, Akhtar Jamil, Mirşat Yeşiltepe, "Skin Lesions Segmentation and Classification for Medical Diagnosis", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

21. Doğancan Ulutas, **Alaa Ali Hameed**, Erdal Alimovski, "Weather Forecasting Using Back Propagation Feed Forward Neural Network and Multiple Linear Regression", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

22. Elif Aşıcı, **Alaa Ali Hameed**, Akhtar Jamil, Jawad Rasheed, "COVID-19 Detection from Chest X-ray Images", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

23. Orçun Kitapcı, **Alaa Ali Hameed**, Akhtar Jamil, "Electricity Loss and Fraud Prediction with Deep Learning", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

24. Ayşenur Topbaş, **Alaa Ali Hameed**, Akhtar Jamil, "Hypermeters Optimization in Recurrent Neural Networks-LSTM Approach for Human Activity", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

25. Fatıma Kırac, Akhtar Jamil, **Alaa Ali Hameed**, Jawad Rasheed, Mirsat Yesiltepe, Bulent Bayram, "Machine Learning Methods for Land Cover Classification from Multi-Spectral Images", International Conference on Computing and Machine Intelligence (ICMI 2021), 2021.

26. Tuba Elmas Alkhan, **Alaa Ali Hameed**, Akhtar Jamil, "Deep Learning for Face Detection and Recognition", International Conference on Advanced Engineering, Technology and Applications (ICAETA-2021), 2021.

27. Mohammad Ikhsan Zakaria, Akhtar Jamil, **Alaa Ali Hameed**, "Deep Learning-based Healthcare Data Analysis System", International Conference on Advanced Engineering, Technology and Applications (ICAETA-2021), 2021.

28. Emir Akcin, Kemal Sami Isleyen, Enes Ozcan, **Alaa Ali Hameed**, Erdal Alimovski, Akhtar Jamil, A Hybrid Feature Extraction Method for Heart Disease Classification using ECG Signals, 2021 The Innovations in Intelligent Systems and Applications Conference (ASYU). IEEE, 2021.

29. Ayşenur Topbaş, Akhtar Jamil, **Alaa Ali Hameed**, Syed Muzafar Ali, Sibghatullah Bazai, Syed Attique Shah, Sentiment Analysis for COVID-19 Tweets Using Recurrent Neural Network (RNN) and Bidirectional Encoder Representations (BERT) Models, ICE CUBE 2021: 2021 International Conference on Computing, Electronic and Electrical Engineering (ICE Cube). IEEE, 2021.

30. Vildan Mercan, Akhtar Jamil, **Alaa Ali Hameed**, Irfan Ahmed Magsi, Sibghatullah Bazai, Syed Attique Shah, Hate Speech and Offensive Language Detection from Social Media, ICE CUBE 2021: 2021 International Conference on Computing, Electronic and Electrical Engineering (ICE Cube). IEEE, 2021.

31. Abdullah Ahmed Al-Dulaimi, Muhammet Güneşer, **Alaa Ali Hameed**, Thermal modeling for underground cable under the effect of thermal resistivity and burial depth using Finite Element Method, The Sixth Smart City Applications International Conference (SCA21). Springer LNNS, 2021.

32. **Alaa Ali Hameed**, Akhtar Jamil, Zeynep Orman, Syed Attique Shah, Application of Generalized Relevance Linear Vector Quantization for Diabetes Diagnosis, 2021 International Conference on Innovative Computing (ICIC). IEEE, 2021.

33. Abdullah Ahmed Al-Dulaimi, Muhammet Tahir Güneşer, **Alaa Ali Hameed**, Investigation of Thermal Modeling for Underground Cable Ampacity Under Different Conditions of Distances and Depths, 5th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT). IEEE, 2021.

34. Akhtar Jamil, Bulent Bayram, **Alaa Ali Hameed**, Aftab Ahmed Khan, Glacier Classification from Remotely Sensed Images using Variational AutoEncoder, International Symposium on Applied Geoinformatics (ISAG2021). IEEE, 2021.

35. Seda Guney, Irem Kılınc, **Alaa Ali Hameed**, Akhtar Jamil, Abalone Age Prediction Using Machine

Learning, 2021 The 5th Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI 2021). Springer, 2021.

36. Ebru Nur Mutlu, Ayse Devim, **Alaa Ali Hameed**, Akhtar Jamil, Deep Learning for Liver Disease Prediction, 2021 The 5th Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI 2021). Springer, 2021.

37. Abdullah Ahmed Al-Dulaimi, Muhammet Tahir Guneser, **Alaa Ali Hameed**, The thermal modeling for Underground cable based on ANN prediction, 2021 The 5th Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI 2021). Springer, 2021.

38. Melihsah Cekic, Kübra Nur Korkmaz, Habib Müküs, **Alaa Ali Hameed**, Akhtar Jamil, Amani Yahyaoui, Artificial Intelligence Approach for modeling House Price Prediction, The 7th IEEE International Conference on Data Science and Machine Learning Applications (CDMA 2022). IEEE, 2021, (Under Review).

39. Resul Ozel, Hayriye Erol, Ismail Nebi Genc, **Alaa Ali Hameed**, Akhtar Jamil and Faezeh Soleimani, Earthquake Forecasting based on Automated Statistical Learning Techniques, The 7th IEEE International Conference on Data Science and Machine Learning Applications (CDMA 2022). IEEE, 2021, (Under Review).

REFERENCES

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Eastern Mediterranean University, Turkey.
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Istanbul University-Cerrahpasa, Istanbul, Turkey.
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Asst. Prof. Dr. Akhtar Jamil
Position: Asst. Prof. Dr., Department of Computer Science,
National University of Computer and Emerging Sciences, Pakistan.
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