

# Academic Curriculum Vitae (Athraa Jasim Mohammed)

## 1. Personal Information:

**Name:** Athraa Jasim Mohammed

**Languages:** Arabic / English

**Place of Residence:** Baghdad/ Iraq

**Date of Birth:** 1976

**Religion:** Muslim

**Marital status:** Married, 3 children's

**Specialization:** Computer sciences/ Artificial Intelligent

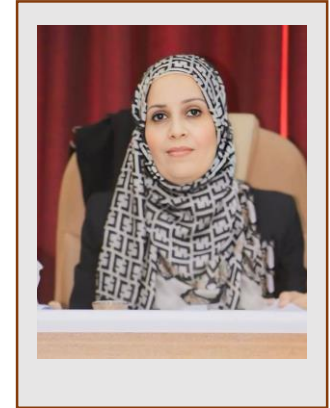
**Research Specialization:** Clustering, Computational Intelligence, Cluster Analysis, Machine Learning, Data Clustering, Clustering Algorithms, Classification, Unsupervised Learning, Data Mining and Knowledge Discovery, Algorithms, Swarm Intelligence, Natural language processing, Prediction, Multi criterion optimization, Forecasting.

**Current Research Interests:** Clustering, Computational Intelligence, Cluster Analysis, Machine Learning, Data Clustering, Clustering Algorithms, Classification, Unsupervised Learning, Data Mining and Knowledge Discovery, Algorithms, Swarm Intelligence, Natural language processing, Prediction, Multi criterion optimization, Forecasting.

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## 2. Academic Qualifications:

Degree science	University	Department	Date
B.Sc.	University of Technology	Computer Science	1998

<b>M.Sc.</b>	Universiti Utara Malaysia	School of Computing, UUM College of Arts and Science	2012
<b>PhD.</b>	Universiti Utara Malaysia	School of Computing, UUM College of Arts and Science	2016

### 3. Present Appointment:

Asst. Professor Dr. since 5/1/2021.

### 4. The published Papers

1. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Document Clustering Based on Firefly Algorithm. Journal of Computer Science. Volume 11, Issue 3, Pages 453-465, 2015, DOI:10.3844/jcssp.2015.453.465, **(Indexed by Scopus)**.
2. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Discovering Optimal Clusters using Firefly Algorithm. International Journal of Data Mining, Modelling and Management, 2016, **indexed by Scopus (Elsevier)**.
3. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: GF-Clust: A Nature-inspired Algorithm for Automatic Text Clustering. Journal of Information and Communication Technology (JICT), 2016, **indexed by Scopus**.
4. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: FireflyClust: An Automated Hierarchical Text Clustering Approach. JurnalTeknologi, UTM University, 2017, **indexed by Scopus**.
5. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Weight-Based Firefly Algorithm for Document Clustering. In: Proceedings of the First International Conference on Advanced Data and Information Engineering (DaEng-2013), v. 285, Lecture Notes in Electrical Engineering, Herawan, T., Deris, M. M., Abawajy, J., Springer Berlin Heidelberg, pp. 259-266, (2014), **Springer(indexed in ISI)**.
6. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: A Newton's Universal Gravitation Inspired Firefly Algorithm for Document Clustering. In; Advanced in Computer Science and its Applications, v. 279, Lecture Notes in Electrical Engineering, Jeong, H.Y., Yen, N. Y., Park, J.J. (Jong Hyuk), Springer Berlin Heidelberg, pp. 1259-1264, (2014), **Springer(indexed in ISI)**.
7. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Experimental Analysis of Firefly Algorithms for Divisive Clustering of Web Documents. In: Proceedings of The First

International Conference on Soft Computing and Data Mining (SCDM-2014), v. 287, book section of the Recent Advances on Soft Computing and Data Mining, Advances in Intelligent Systems and Computing, Herawan, T., Ghazali, R., Deris, M. M., Springer International Publishing, pp. 487-496, (2014), **Springer(indexed in ISI)**.

8. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Nature Inspired Data Mining Algorithm for Document Clustering in Information Retrieval. In: Proceedings of 10th Asia Information Retrieval Societies Conference (AIRS 2014), v. 8870, Book Section Lecture Notes in Computer Science, Jaafar, A., Mohamad Ali, N., Mohd Noah, S., Smeaton, A., Bruza, P., Bakar, Z., Jamil, N., and Sembok, T., Springer International Publishing, pp. 382-393, (2014),**Springer(indexed by ISI)**.
9. YuhanisYusof, Ahmad, F. K., Kamaruddin, S. S., Omar, M. H., and AthraaJasim Mohammed: Short Term Traffic Forecasting based on Hybrid of Firefly Algorithm and Least Squares Support Vector Machine. In: Proceedings of International Conference on Soft Computing in Data Science 2015 (SCDS2015), (2015),**Springer(indexed in ISI)**.
10. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Determining Number of Clusters using Firefly Algorithm with Cluster Merging for Text Clustering. Accepted in the 4th International Visual Informatics Conference 2015 (IVIC'15), **Springer(indexed in ISI)**.
11. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Integrated Bisect K-means and Firefly Algorithm for Hierarchical Text Clustering. Submitted to International Symposium of Information and Internet Technology, American Scientific Publishers, **Advanced Science Letters, SCOPUS/ISI Indexed (Q3 Journal Rank by SCIMAGOR)**.
12. Athraa Jasim Mohammed, Husniza Husni: Blogs Search Engine Using RSS Syndication and Fuzzy Parameters. International Conference on Advances in Image Processing and Computation Techniques, (2012).
13. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Document Clustering for Knowledge Discovery using Nature-inspired Algorithm. Proceedings of Knowledge Management International Conference 2014 (KMICe2014), 12-15 August 2014, Langkawi, Malaysia, **indexed by ISI**.
14. AthraaJasim Mohammed, YuhanisYusof, HusnizaHusni: Basic Firefly Algorithm for Document Clustering. Proceeding of the 2nd Innovation and Analytics Conference & Exhibition 2015 (IACE 2015), **AIP (indexed by ISI and Scopus)**.

15. Yuhanis Yusof, Fauziah Baharom, Athraa Jasim Mohamed: Optimizing the Management of Knowledge Assets using Swarm Intelligence. Proceedings of Knowledge Management International Conference (KMICe2018), 25–27 July 2018, Miri Sarawak, Malaysia, **indexing by Web of Science**.
16. Mohammed, A.J., Ghathwan, K.I., Yusof, Y., Optimal robot path planning using enhanced particle swarm optimization algorithm, Iraqi Journal of Science, 2020, 61(1), pp. 178–184.
17. Mohammed, A.J., Ghathwan, K.I., Intelligent bio-inspired whale optimization algorithm for Color image based segmentation, Pertanika Journal of Science and Technology, 2020, 28(4), pp. 1389–1411.
18. Mohammed, A.J., Ghathwan, K.I., Yusof, Y., A hybrid least squares support vector machine with bat and cuckoo search algorithms for time series forecasting, Journal of Information and Communication Technology, 2020, 19(3), pp. 351–379.
19. Ghathwan, K.I., Mohammed, A.J., Intelligent Bat Algorithm for Finding Eps Parameter of DbScan Clustering Algorithm, Iraqi Journal of Science, 2022, 63(12), pp. 5572–5580.
20. Monadhel, H., Abbas, A.R., Mohammed, A.J., COVID-19 Vaccine: Predicting Vaccine Types and Assessing Mortality Risk Through Ensemble Learning Algorithms, F1000Research, 2024, 12, 1200.
21. MR Shihab, RF Ghani, AJ Mohammed, Machine learning techniques for vehicle detection, IRAQI JOURNAL OF COMPUTERS ..., 2022.
22. HS Wdhayeh, RA Azeez, AJ Mohammed, A Proposed Algorithm for Hiding a Text in an Image Using QR Code, IRAQI JOURNAL OF COMPUTERS ..., 2023.

## 5. Short Biography

**Dr. Athraa Jasim Mohammed** is asst. Professor in the Department of Computer Sciences, University of Technology-Baghdad-Iraq. She completed her Bachelor of Computer Science in the Department of Computer Sciences-University of Technology, Baghdad, Iraq, in 1998. She received her Master degree in Intelligent Systems from the Universiti Utara Malaysia in 2012, she received her Ph.D. degree from the Universiti Utara Malaysia in 2016. Dr Athraa has been the author of numerous technical papers since 2010, her research interests include Clustering, Computational Intelligence, Cluster Analysis, Machine Learning, Data Clustering, Clustering Algorithms, Classification, Unsupervised Learning, Data Mining and Knowledge Discovery,

Algorithms, Swarm Intelligence, Natural language processing, Prediction, Multi criterion optimization, Forecasting.

## 6. Supervision

Dr. Athraa J. Mohammed supervised of many MSc. Thesis and PhD dissertations in Computer Science.

## 7. Discussion thesis of high graduate studies:

Dr. Athraa J. Mohammed is one of Discussion Committee Member of many MSc. Thesis and PhD dissertations in Computer Science.

## 8. Important Sites:

### Google Scholar:

<https://scholar.google.com/citations?user=gocXWC4AAAAJ&hl=en>

### Research Gate:

<https://www.researchgate.net/profile/Athraa-Mohammed>

### Scopus:

<https://www.scopus.com/authid/detail.uri?authorId=56031654500>

### Publon (Web of Science):

<https://www.webofscience.com/wos/author/record/G-4314-2019>

### Orcid:

<https://orcid.org/0000-0003-4919-9463>View this author's ORCID profile

## 9. Activities

- Taught ASP language workshop.
- Taught website design using HTML workshop.
- Taught IC3 certification workshop.

- Taught SPSS in computer center.
- Taught Java programming language in computer center.
- Taught Matlab language in computer center.
- Taught Web design language in computer department.
- Worked as a programmer in programming the university systems.
- Taught Visual FoxPro version 6 in Computer Science Department / University of Technology.
- Session chair of the Knowledge Management International conference 2014 (KMICE 2014).
- Technical committee of the “Knowledge Management International Conference 2018” (KMICE 2018).
- Technical committee member of the “7th International Conference on Computing and Informatics 2019” (ICOICI 2019).
- Technical committee member of the “9th International Conference on Computing and Informatics 2023” (ICOICI 2023).
- Program committee of SCDM2020 (4<sup>th</sup> International Conference on Soft Computing and Data Mining 2020).
- Program committee of SCDM2022 (5<sup>th</sup> International Conference on Soft Computing and Data Mining 2022).
- Program committee of SCDM2024 (6<sup>th</sup> International Conference on Soft Computing and Data Mining 2024).
- The head of the Software branch / Department of Computer Science / University of Technology 2020 – 2024.
- The head of the information system branch / Department of Computer Science / University of Technology 2024 – continue.

## 10. Awards & Grants

- Gold medal in IT & Multimedia Carnival Day (2011) organized by UUM College of Arts and Sciences.
- Bronze medal in ICT Research and Innovation Expo (2014) organized by School of Computing, UUM College of Arts and Science.
- Best employee (2008) in Women's Day organized by University of Technology, Iraq.
- Best Lecturer ( 2017) in Women's Day organized by University of Technology, Iraq.

## 11. Date Curriculum Vitae Prepared:

2024-10-26