# Curriculum Vitae

#### **Personal Information**

Name: Asst. Prof. Ts. Dr. Ghassan Saleh Hussein ALDharhani

Nationality: Yemeni Resident of: Malaysia Place of Birth: Aden City -Yemen Date of Birth: 5 Oct, 1975

Gender: Male

**Marital Status: Married** 

Address: Kajang 43000, Selangor, Malaysia

E-Mail: ghassan@ucsiuniversity.edu.my ghassanxyz@gmail.com, gh2020@live.com

Senior Lecturer, Head of Digital Innovation Department, Institute of Computer Science & Digital Innovation (ICSDI) UCSI University, Kuala Lumpur, Malaysia http://www.ucsiuniversity.edu.my

Graduated Master and PhD in Computer Science from: Artificial Intelligence, Data Mining & Optimization Group (DMO), Center of Artificial Intelligence and Technology (CAIT), Faculty of Information Science and Technology (FTSM), Universiti Kebangsaan Malaysia (UKM) (National University of Malaysia)

Bangi, Selangor, Malaysia http://www.ftsm.ukm.my

## **Professional Certificates**

- Artificial Intelligence
- Machine Learning
- Cyber Security Certified Ethical Hacker (CEH V11)
- Cyber Security Academia Malaysia (CSAM)
- Data Mining and Knowledge Discovery
- Programming skills in Python, C++, Java, and others
- Graduate Technologist, and Professional Technologist Certified MBOT Malaysia
- Outcome-Based Education (OBE), Curriculum Design and Development MQF 2.0
- Quality of Education Netherlands Program 9.
- 10. IEEE Computer Society Certificate
- 11. IEEE Consultants Network Certificate
- 12. Train-the-Trainer (TTT) Certified HRDF Trainer

## I have got professional positions during my life experience from 2019 until now in Malaysia

- Dean of faculty
- 2. Director of center
- Head of Department 3.
- Academic advisor
- Co-supervisor of PhD students (From 2022 until now)
- 6. Senior Lecturer
- Trainer

#### Core Skills 2001 until now

PhD in Computer Science, practice and theory professional with experience in lecturing & teaching: Programming, Data Structure and Algorithms, Data Mining & Analytics, Machine Learning, Artificial Intelligence, Database management System, Software Engineering, Introduction to Cyber Security, Cryptography, and Introduction to Computer Networking, and solve computing problems and others. Ability to explain, lecture, present and teach (Demystifying Knowledge and Tutorials to students) with History of Academic Employment since 2001 with over 20 years of experience. I am Senior Lecturer in Computer Science, member of the Research Team, and Supervisor of degree and postgraduate students. Join to Industrial Sector that is related to IR4.0, and Emerging Technologies. My current research interests are Artificial Intelligence, Cyber Security, Data Mining and Knowledge Discovery, Data Science & Analysis, Object Oriented Programming, Programming skills in Python, C++, and Java, Time Series Analysis, Machine Learning and Climate Informatics, Emerging Technology and Innovative Applications, Academic Research and Contributions for postgraduate students.

## Contribution

Cyber Security, Artificial Intelligence (AI), and Machine Learning(ML).

#### Academic Qualification (BSc, Master, PhD in Computer Science)

**2012-2017 PhD in Computer Science,** Data Mining, Artificial Intelligence and Technology, Center for Artificial Intelligence Technology (CAIT), Faculty of Science and Information Technology at UKM University, Malaysia.

Title of PhD Thesis:

Time Series Prediction and Fuzzy Based Algorithms for Climate Patterns Discovery;

Current GPA of PhD Research Methodology (3.67 over 4).

**2009-2011** Master in Computer Science, Center for Artificial Intelligence Technology (CAIT), Faculty of Science and Information Technology at UKM University, Malaysia.

[Coursework & Thesis], Data Mining & Knowledge Discovery

**Title of Master Thesis:** Ant Colony Algorithm for Graph Based Association Rules Mining; Current CGPA of Master (3.73 over 4).

1997-2001 Bachelor in Computer Science

CGPA of Degree (3.68).

Faculty of Engineering and Computer Science AL Ahgaff University Al Mukkalla, Hadhramaut, Yemen

Garada Secondary School (High School), Aden City, Yemen

## **Academic Affairs Skills**

- Attend Training in Certified Ethical Hacker CEH V11.
- Outcome-Based Education (Learning Outcomes) MQF 2.0.
- Outcome-Based Education (Constructive Alignment) MQF 2.0.
- Consultation in Artificial Intelligence, Data Analytics, Machine Learning and Cyber Security
- Curriculum Design and Development based on MQF 2.0.
- Academic Affairs / Help in Faculty Management / Manage New Programme at Faculty.
- Research and Contributions / Research Papers / Research Group Management (postgraduates).
- Preparation of Outcome-Based Education (OBE) documentation for MQA/MQF, and Academic Affairs
- Help the faculty to communicate easily with students for improving their knowledge theoretically and practically.
- Supervisor of Research projects for degree or postgraduate students / Data Mining and Knowledge Discovery / AI Algorithms & WEKA.
- Relationships with the Industrial Sector that is related to IR4.0 and Emerging Technologies.
- Programming / Data Structure and Algorithms / Time series dataset analysis.
- Demystifying Knowledge and Tutorials to students.
- Emerging Technology and Innovative Applications.
- Create and effectively deliver an educational lectures to students.
- Transmit the ideas and teaching points to real project / Encourage Active Participation (students).
- Wisdom, Empathy and Harmony in Interpersonal Relationships (lecturers / staff /students).
- I attend many workshops, research group and academic discussions in Database, Data Mining, and Data Science.

## **Computing and Programming Skills**

I have working knowledge of:

- Object Oriented Programming (Theory and practice programming using JAVA).
- Java Programming Language (Core Java & Advanced Java) [NetBeans].
- C++, with Data Structure and Algorithms and OOP Programming.
- Data Mining, Data Analytics, Al Algorithms & WEKA.
- R Programming (Basic and Data Analytics).

- Python Programming (Basic and Intermediate).
- Introduction to VB.NET programming (Basic and Intermediate).
- Artificial Intelligence Algorithms, Computer Security Algorithms.
- Join to **Industrial Sector** that is related to IR4.0, **Emerging Technologies**, and apply projects under Data Mining, Database, Computer Security and Software Engineering subjects (**Real Cases**).
- Concept of Deep Learning using Java (DL4J).
- Concept of Big Data.
- Concept of Internet of Things (IoT).
- Data Structure and Al Algorithms.
- · Statistical analysis using SPSS.
- Database: Structure Query Language (SQL & PL/SQL).
- Databases: Oracle, MySql.
- Operating Systems: Windows 7 & up, Basics of Linux Ubuntu operating systems [Concept of Linux operating system].
- Basic PHP Programming and MySql.
- Ms-Office 2019 & up.
- Computer Networking and Cisco CCAN1.
- Basic Microsoft Power BI Business Intelligence for beginner.

## Experience for MQA/MQF2.0, and Academic Affairs and Team work 2020 - 2022

- A) Completed two MQA Workshops based on MQF 2.0 successfully as follows:
  - Outcome-Based Education (Learning Outcomes)
  - Outcome-Based Education (Constructive Alignment)
- B) Completed three programs based on MQF 2.0 successfully:
  - Bachelor of Computer Science We got Full Accreditation (FA).
  - Bachelor in Information Technology (Cyber Security) We got Provisional Accreditation (PA).
  - Master in Information Technology We got Provisional Accreditation (PA).
- C) Submitted two programs based on MQF 2.0 successfully to MQA:
  - Bachelor of Computer Science (Cyber Security).
  - Bachelor of Computer Science (Artificial Intelligence).

## Occupation / History of Employment / Experience (Since 2001)

#### Work experience after Master and PhD in Malaysia:

- Head of Digital Innovation Department, Institute of Computer Science & Digital Innovation (ICSDI), UCSI University, Kuala Lumpur, Malaysia, www.ucsiuniversity.edu.my [April 2022 until Now].
- Senior Lecturer in Department of Computer Science, Institute of Computer Science & Digital Innovation (ICSDI), UCSI University, Kuala Lumpur, Malaysia, <a href="www.ucsiuniversity.edu.my">www.ucsiuniversity.edu.my</a> [January 2022 until Now].
- Dean cum Senior Lecturer, Faculty of Computing and Creative Technology (FACT), Geomatika University College (GUC), Kuala Lumpur, Malaysia, https://www.geomatika.edu.my/ [January 2019 until 31 December 2021].
- **Director** cum **Senior Lecturer**, Center of Emerging Technology and Innovative Application (CETIA), Faculty of Computing and Creative Technology (FACT), Geomatika University College (GUC), Kuala Lumpur, Malaysia, https://www.geomatika.edu.my/ [January 2019 until December 2021].
- Professor Award Geomatika University College (GUC) 2019, Kuala Lumpur, Malaysia.
- Keynote Speaker, Reviewer 1st International Conference in Emerging Technology and Innovative Applications – ICETIA19 – MAGIC Cyberjaya – Malaysia [ 21 – 22 October 2019].

- Internal Examiner / Chairperson for a candidature defense / postgraduate students, Geomatika University College (GUC), Kuala Lumpur, Malaysia.
- Part Time Lecturer Department Of Information System, Faculty of Computer Science and Information Technology, University of Malaya, Kuala Lumpur, Malaysia, www.fsktm.um.edu.my [September / 2018 to February / 2019].
- Consultant in Data Analysis, Data Mining, Artificial intelligence (AI) and Emerging Technology and Innovative Applications.
- TTT Certified HRDF Trainer Certificate [Decmber 2019].
- IEEE ICSCEE 2018 Reviewer : International Conference on Smart Computing and Electronic Enterprise.
- Data Mining Trainer, workshop Instructor and organizer at UKM University, Malaysia, http://www.ftsm.ukm.my/cait/ from 2013/ 2014/2018.
- Attend many Seminars, Workshops, and Conferences in Malaysia.

## Work experience before Master and PhD:

- Head of Educational Affairs Department at Aden Community College, Aden city Yemen, www.acc.edu.ve [2007-2008].
- Lecturer at Aden Community College (ACC) in Computer Programming & IT Department [2004-2008].
- Trainer at Aden University in Computer Programming & IT Department [2004-2008].
- Trainer at AtaIntic Institute (Aden City) for Computer Science Bachelor Students [2004-2008].
- System Analyst for undergraduate and diploma students' projects [practice].
- Data Analyst for Real and Benchmark Datasets. I supervised several data analysis projects during my academic experience [2012-2018].
- Instructor and Assistant Lecturer at Al-Ahgaff University [2001-2004] and Aden Community College [2004-2008].
- Trainer in many Computer Learning Centers such as New Horizon, & Atlantic-Aden branch [part time] [2004-2008].
- Instructor, Institute of Aden [part time], From 1/7/2000 to 15/9/2000.
- Instructor, British Center [part time], From 1/1/2001 to 15/4/2001.
- Assistant Lecturer, Al-Ahgaff University, From 9/2001 to 3/2004.
- Instructor, MII Institute [Part Time], From 5/2003 to 3/2004.
- Supervisor of many computer Programming projects (Diploma) at Aden Community College (ACC).
- I teach many courses such as: Database Management System, Software Engineering, System Analysis & Design, Data Structure and Algorithm using C++, Core & Advanced Java .....etc [since 2001]
- Work as a member of analysis group of web projects and applications [System Analyst Group].
- This websites has been honored awards of PAN ARAB WEB AWARDS ACADEMY 2008
- http://www.hadhramaut.info/ category ,PAWA , competition 2008).
  (THE GOLDEN AWARD under the governmental organizations

#### **Publication**

#### **Online Publications:**

- Automated Boolean Matrix Data Representation Scheme through AVL tree for Mining Association Rules.
   "Advances in Natural and Applied Sciences 7, no. 3 (2013): 307-317". Scopus Journal.
- 2. A Graph-Based Ant Colony Optimization for Association Rule Mining. "Arabian Journal for Science and Engineering 39, Springer, no. 6 (2014): 4651-4665". ISI Journal Q3.
- Fuzzy-based Shapelet for mining climate change time series patterns." In Advances in Visual Informatics, pp. 38-50. Springer International Publishing, 2015". I have collected Certificate of Best Paper Award.
- 4. A text mining system for deviation detection in financial documents." Intelligent Data Analysis 19, no. s1 (2015): S19-S44". ISI Journal Q2.
- 5. Discovering meaningful patterns for tropical climate change in Malaysia. International Journal of Global Warming 15.2 (2018): 157-174. ISI Journal Q3.
- 6. An Empirical Analysis on the Importance of Self-Efficacy, Resource Facilitating Condition and Perceived Behavioural Control in Propelling One's Intention to Purchase Halal Personal Care Products: The Moderating Role of Spiritual Intelligence, Acta Scientific Nutritional Health (ASNH), Volume 3, Issue 5, 2019.
- 7. Ozone Suppression Classification Model in Klang Valley. Solid State Technology, 590-596, 2020.
- 8. The Summer Heat of **Cryptojacking** Season: Detecting Cryptojacking using Heatmap and Fuzzy." In International Conference on **Cyber Resilience** (ICCR), pp. 1-5. IEEE, **2022**.
- 9. **Cybersecurity** Trends in Health Information Systems." In International Conference on Cyber Resilience (ICCR), pp. 01-04. IEEE, **2022**.
- 10. Mining Social Media Data to Classify user Contents in Minimized Network Structures." In 6th International Conference on Trends in Electronics and Informatics (ICOEI), pp. 1799-1805. IEEE, **2022**.
- 11.Al-based Home **Security** System with Face Recognition." 6th International Conference on Trends in Electronics and Informatics (ICOEI). IEEE, **2022**.

#### **Cyber Security Publications:**

Those three IEEE conference papers on which I collaborated with my network are accepted, submitted and waiting to be published:

1. BloX - Blockchain Based Cryptocurrency Wallet for Web 3.0

## ISI Publications are still in progress (submitted to journal):

Influence Factors for Ozone Exceedance based on Ensemble Machine Learning Algorithms

#### ISI Publications are still in progress (Unpublished works / submitted to journal):

1. A Fuzzy-based Frequent Patterns with Apriori for Spatio-Temporal Climate Changes

#### Google Scholar:

https://scholar.google.com/citations?user=xQpkteUAAAAJ&hl=en

#### LinkedIn:

https://www.linkedin.com/in/asst-prof-%C2%A0ts-dr-ghassan-aldharhani-33a99b52/

#### FRGS Grant 2021

- ESTABLISHMENT OF AIR POLLUTION PREDICTION FRAMEWORK FOR MALAYSIAN COMMUNITY
- FRGS Intrenal Evaluator UCSI 2022

References		
Prof. Dato' Ir. Dr. Abdul Wahab Mohammad	UKM, Malaysia	(drawm@ukm.edu.my)
Prof. Datin Dr. Sameem Binti Abdul Kareem	UM, Malaysia	(wisesam86@gmail.com)
Prof. Dr. Salwani Abdullah	UKM, Malaysia	(salwani@ukm.edu.my)
Prof. Dr. Azuraliza Abu Bakar	UKM, Malaysia	(azuraliza@ukm.edu.my)
Prof. Dr. Khairuddin Omar	UKM, Malaysia	(ko@ukm.edu.my)
Prof. Dr. Shahrul Azman Mohd Noah	UKM, Malaysia	(shahrul@ukm.edu.my)
Assoc. Prof. Dr. Zulaiha Ali Othman	UKM, Malaysia	(zao@ukm.edu.my)
Assoc. Prof. Dr. Ravie Chandren Muniyandi	UKM, Malaysia	(ravie@ukm.edu.my)
Assoc. Prof. Dr. Mumtaz Begum Binti Peer Mustafa	UM, Malaysia	(mumtaz@um.edu.my)
Assoc. Prof. Dr. Chiew Thiam Kian	UM, Malaysia	(tkchiew@um.edu.my)

#### Membership

- Climate Change Team UKM University
- Cyber Security Academia Malaysia also known as CSAM
- IEEE counselor GUC •TTT Certified Trainer •Ts. Professional Technologist MBOT

# Additional Experience / Information

## **Skills and Abilities**

- Ability to deal with people of different multicultural backgrounds.
- Have good written and oral interpersonal communication skills.
- Have the ability to do tasks.
- Good leadership skills with the ability to learn fast.
- Leadership of Research team.
- Communication & time management.
- Ability to work hard in a team or independently.
- Ability to explain, present and teach.
- Contributing to the construction of a more successful, education, behavior, and helping society.
- Building society: Raising society awareness, education and development.
- Demystifying Knowledge and simplifying explanation of tutorials.
- Relationships with the Industrial Sector that is related to IR4.0 and Emerging Technology.

#### Real Datasets in Malaysia

- The Institute of Climate Change (IPI), UKM archives and collects weather data (Time Series) from various climate change measuring stations in the state of Selangor, Malaysia. In this study, time series datasets, containing data on the mean hourly temperature (MHT) over a long period, were collected from four stations, namely, KLIA Sepang, Petaling Jaya, Subang, and Universiti Malaya. Years(1980 – 2012).
- Another datasets (Time Series) are collected from two institutes: The Climate Change Institute (IPI) and the Institute for Environment and Development (LESTARI) at UKM university with many parameters and long time series. Years (1980 2016).
- Semi-final The 2015 HILTI Big Data Analytics Competition. HILTI: Powering business with data <a href="https://www.hilti.com">https://www.hilti.com</a> The four data tables used as data inputs come from Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) systems.

## **Benchmark Datasets**

I use data analysis based on Benchmark datasets (UCI Machine Learning Repository <a href="https://archive.ics.uci.edu/ml/index.php">https://archive.ics.uci.edu/ml/index.php</a>) and (FIMI repository <a href="https://fimi.ua.ac.be/">https://fimi.ua.ac.be/</a>).

## Workshops / Certification / Meeting and Training From 2004 until NOW

- 1. Cyber Security Certified Ethical Hacker (CEH V11)
- 2. Artificial Intelligence
- 3. Outcome-Based Education MQA / MQF 2.0
- 4. IEEE Membership Certificate
- 5. IEEE Computer Society Certificate of Membership
- 6. IEEE Consultants Network Certificate of Membership
- 7. IEEE Young Professionals Certificate of Membership
- 8. Professional Technologist Certificate from Malaysia Board of Technologists (MBOT) August 2021.
- 9. Graduate Technologist Certificate from Malaysia Board of Technologists (MBOT) March 2021.
- 10. Quality of Education Netherlands Program.
- 11. Certification Confirmation of Aden Community College.
- 12. Certificate of Best Paper Award IVIC2015-UKM Malaysia.
- 13. International Visual Informatics Conference IVIC-UKM Malaysia.
- 14. Big Data workshop IVIC-UKM Malaysia.
- 15. Data Mining (1) (I am the Trainer) at **UKM** Malaysia.
- 16. Data Mining (2) (I am the Trainer) at UKM Malaysia.
- 17. Skymind's Deep Learning in Computer Vision Deep Learning for Java (DL4J).
- 18. Malware Forensics and Cyber Security.
- 19. Outcome-Based Education (OBE) documentation / Academic Affairs for MQA/MQF workshop(s).
- 20. PHP and MySql at Aptech.
- 21. Microsoft SQL at Big Tech Malaysia.
- 22. Project Management Professional (PMP) at UM Malaysia.
- 23. Academic Writing and Research Tools at UM Malaysia.
- 24. Academic Writing at **UKM** Malaysia.
- 25. Problem Identification at **UKM** Malaysia.
- 26. Artificial Intelligence Seminar at UKM Malaysia.
- 27. Data Science at UTM Johor Malaysia.
- 28. 3rd- Artificial Intelligence Seminar at UKM Malaysia.
- 29. Data Mining at UKM Malaysia.
- 30. Climate Change at UKM Malaysia.
- 31. Climate Change at **UPM** Malaysia.
- 32. Java Programming Essentials for Hadoop training and concept of Apache Kafka.
- 33. Certificate of Python Programming Language Malaysia.
- 34. Concept of Blockchain technology workshop at UKM Malaysia.
- 35. SPSS Software and Statistical Analysis at UKM Malaysia.
- 36. Artificial Intelligence at **UKM** Malaysia.
- 37. Blockchain Seminar at UKM Malaysia.
- 38. Data Analysis with R.
- 39. Ground Penetrating Radar (GPR) Underground Utility Data Acquisition and Processing.

## Workshops and Conferences: shared knowledge and attendance, Malaysia

- 1. Many Conferences in Data Mining and Knowledge Discovery.
- 2. Many Conferences in Emerging Technology and Innovative Applications.

- 3. Online Lecturing with ZOOM and MS-Skype.
- 4. Object Oriented Programming using Java (Core and Advanced).
- 5. Python Programming (Basic and OOP).
- 6. Data Analytics in R programming.
- 7. Climate Change Environment and Remote Sensing (Time Series Analytics).
- 8. Software Engineering and System Development.
- 9. Concept of Big Data and Cyber Security.
- 10. Concept of Internet of Things (IoT) and Data Security.
- 11. Statistical data analysis.
- 12. International Conferences: Data Mining, Artificial Intelligence, and Climate Change.
- 13. 8th UN-CECAR international conference in the National University of Malaysia (UKM), MALAYSIA <a href="http://cecar.unu.edu/climate/events">http://cecar.unu.edu/climate/events</a> University Led Development.
- 14. Big Data Workshop (UKM 2015), MALAYSIA.
- 15. Data Mining Workshop (UKM 2013 to 2017), MALAYSIA.
- The 2nd International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2013), MALAYSIA.
- 17. Advances in Visual Informatics: 4th International Visual Informatics Conference, IVIC 2015, Bangi, Malaysia, November 17-19, 2015, MALAYSIA.
- The 3rd International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2016), MALAYSIA.
- 19. Academic Publishing—Writing, Submission, and Successful Publication, (Enago Academy 2017 https://www.enago.com), MALAYSIA.

## Languages

Language level

Arabic Mother tongue English very good Malay fair

## (\*) Voluntary works in Malaysia

- (\*) Volunteer (charity work): Yemeni-School in Malaysia from 2010 to 2017 (FREE just as consultant and educated monitor based on my free time).
  - Helping people in Education fields (Primary, Institutes, Colleges, and Universities).
  - Manage activities with Undergraduate and Postgraduate students.
  - Free Workshops that are related to Computer Science and Information Technology.
  - Raising awareness among young people by meeting and conferences.

## **Interest and Plan for Our Future**

- Looking for New Technology (IR 4.0, Digital Transformation, Emerging Technology, and Innovative Applications) and Contributions.
- Artificial Intelligence Applications, Cyber Security Tools, and Framework, Deep Learning Models, Academic Research and Contributions.
- Smart Ideas Research and Contributions.
- International Talk for Emerging Technologies
- Software Development.
- Teach ALL people and share knowledge.
- Internet, Reading, Traveling, Watching Scientific movies, Science Fiction, Discovery Science and Action cartoon.
- Driving Malaysian license.