Curriculum Vitae

Personal Details:

Name: Mohammed Abbas Fadhil Al-Husainy.

Date of Birth: 29/01/1973.

Marital Status: Married.

Children: Four.

Academic Rank: Professor.

High Degree Obtained: Ph.D.

Major: Computer Science.

Specific Specialization: Computer Science & Cyber Security.

Contact Information:

- **Current Address:** Amman, Jordan.

- **Mobile Tel.:** 962-79-6846110.

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- **Follow me on** Google Scholar, Research Gate, ORCID, ResearcherID, LinkedIn, Skype, Facebook by using my full name "**Mohammed Abbas Fadhil Al-Husainy**"

People who can recommend me:

- Prof. Hamza A. Al-Sewadi, Iraq University College, Iraq. alsewadi@hotmail.com

- Prof. Abdallah Alashqur, Jordan. a.alashqur@gmail.com

- Dr. Bassam Al-Shargabi, Middle East University, Jordan. bshargabi2080@gmail.com

- Dr. Diaa Mohammed Uliyan, University of Hail, KSA. diaa_uliyan@hotmail.com

- Dr. Hikmat Jaber, Applied Science University, Jordan. hikmat_jaber@hotmail.com

- Dr. Afaf Al-Kaddo, University of Technology, Iraq. Afafbad@yahoo.com

- Dr. Muhannad Abu-Hashem, King Abdulaziz University, KSA, abu_hashem4@yahoo.com

Education and Qualifications:

1. Ph. D. In **Multi-Media Data Processing** from the Dept. of Computer Science, University of Technology, Baghdad-Iraq, **Enrolled date:** (1/10/1998), **Graduate date:** (24/7/2002). **GPA (Grade):** 78.8 (Good).

   Dissertation Title: "*Multi-Media Data Processing Using Genetic Algorithm*".

2. M. Sc. In **Artificial Intelligent** from the Dept. of Computer Science, College of Sciences, Saddam University, Baghdad-Iraq, **Enrolled date:** (1/9/1994), **Graduate date:** (15/2/1997). **GPA (Grade):** 72.3 (Good).

   Master Thesis Title: "*DMLS A Machine Learning System*".

3. B. Sc. In **Computer Science** from the Dept. of Computer Science, College of Sciences, University of Mosul, Mosul-Iraq, **Enrolled date:** (1/9/1990), **Graduate date:** (26/6/1994). **GPA (Grade):** 79.5 (Good).

Professional Experience (More than 20 Years):

- **2022 - Present:** Professor, Department Cybersecurity, Faculty of Sciences and Information Technology, Irbid National University, Jordan.

- **2021 - 2022:** Professor, Department of Control & Computer Engineering, College of Engineering, AlMaaqal University, Iraq.

- **2019 - 2020:** Professor, Computer Science Department, Faculty of Information Technology, Middle East University, Jordan.

- **2014 - 2019:** Associate Professor, Computer Science Department, Faculty of Information Technology, Middle East University, Jordan.

- **2013 - 2014:** Associate Professor, Dept. of Multimedia Systems, Faculty of Sciences and Information Technology, Al-Zaytoonah University, Jordan.

- **2002 - 2013:** Assistant Professor, Dept. of Computer Science & Dept. of Multimedia Systems, Faculty of Sciences and Information Technology, Al-Zaytoonah University, Jordan.

- **1999 - 2002:** Lecturer, Dept. of Computer Science, Al-Hadba'a University College, Iraq.

- **1997-1999:** Lecturer, Dept. of Business Management, Al-Hadba'a University College, Iraq.

- **1997-1999:** Lecturer, Dept. of Accounting, Al-Hadba'a University College, Iraq.

- **1997-1998:** Manager of the Computer Center, Al-Hadba'a University College, Iraq.

- **1995-1997:** Lecturer, Faculty of Engineering, Saddam University, Iraq.

Teaching Courses (Bachelor and Master degree):

Master Courses:

	Course Name	Theoretical	Practical
1.	Programming Languages Design (C#, C++, Java, VB, Python)	✓	✓
2.	Cryptography and Computer Security	✓	✓
3.	Network and Systems Security	✓	
4.	Multimedia Technology	✓	
5.	Cloud Computing Security	✓	

Bachelor Courses:

	Course Name	Theoretical	Practical
1.	Secure Communication Protocols	✓	
2.	Network Control and Documentation	✓	✓
3.	Information Security Programming	✓	✓
4.	Introduction to Multimedia	✓	✓
5.	Multimedia Programming	✓	✓
6.	Microprocessors and Assembly Language	✓	✓
7.	Programming Language (C++, JAVA, Python)	✓	✓
8.	Object Oriented Programming (C#, C++, JAVA, Python)	✓	✓
9.	Visual Programming (Visual Basic)	✓	✓
10.	Information Security	✓	✓
11.	Data Structure	✓	✓
12.	Computer Organization & Computer Architecture	✓	
13.	Operating Systems	✓	✓
14.	Digital Logic Design	✓	✓
15.	Discrete Mathematics/Structures	✓	
16.	Internet and Web Page Design	✓	✓
17.	Fundamental of Computer Networks	✓	
18.	Human Computer Interaction	✓	
19.	Professional and Ethical Issues in Computing	✓	
20.	Distributed Systems	✓	
21.	Artificial Intelligence Systems and Expert Systems	✓	
22.	Systems Analysis and Design	✓	
23.	Design and Analysis of Algorithms	✓	✓
24.	Computer Graphics	✓	

Preferred Field of Work (Research Interests):

1. Multi-Media Data Processing
2. Information Security, Cryptography, Steganography, User Authentication
3. Image and Signal Processing
4. Artificial Intelligence Systems and Expert Systems
5. System Analysis and System Design
6. Computer Network
7. Distributed Databases Systems
8. Microprocessor Programming with Assembly Language.
9. Microcontroller and Robotics

Membership:

1. Member of the *Committee of Scientific Research* (2022-Present) in Irbid National University, Irbid-Jordan.

2. Chairman of *Quality Assurance (QA) Committee* (2018) in Faculty of Science and Information Technology, Middle East University, Amman-Jordan.

3. Member of *Quality Assurance (QA) Committee* (2017-2020) in Faculty of Science and Information Technology, Middle East University, Amman-Jordan.

4. Chairman of the *Students Affairs Committee* (2016-2020) in the Faculty of Information Technology, Middle East University, Amman-Jordan.

5. Chairman of the *examinations committee* (2014-2018) in the Faculty of Information Technology, Middle East University, Amman-Jordan.

6. Member of the *Committee of Scientific Research* (2015-2016) in the Faculty of Information Technology, Middle East University, Amman-Jordan.

7. Member of the *Committee to Measure the Effectiveness of Educational Programs* (2015-2016) in the Faculty of Information Technology, Middle East University, Amman-Jordan.

8. Member of the *Library Committee* (2014-2016) in the Faculty of Information Technology, Middle East University, Amman-Jordan.

9. Member of *Quality Assurance (QA) Committee* (2010-2014) in Faculty of Science and Information Technology, Al-Zaytoonah University, Amman-Jordan.

10. Member of *Technical Committee and reviewer* in the International Arab Journal of Information Technology (IAJIT).

11. Member of International Association of Engineers (IAENG).

12. Member of *official referees committee* of the المجلة العربية الدولية للمعلوماتية (IAJI).

13. Member of *editorial board* of Computer and Information Science journal.

Awards & Merits:

- Many letters of thanks for follow-up the defaulters' students, (2015-2018)

- Many letters of thanks for giving additional free lectures to students who have difficulties in some courses, (2016-2017)

- Many letters of thanks for my outstanding performance in carrying out the tasks of many committees formed within the college, (2016-2017)

- Certificate of recognition as one of the most active reviewers in the Technical Committee of IAJIT during the years 2010 and 2011.

- Certificate of thanks and recognition for the preparation of the "Learning Systems Exhibition" that was held during the (ICIT 2011), Al-Zaytoonah University, Jordan.

Supervision of Master Theses:

1. Master thesis in computer science "*A Method for Static Video Summarization to Reducing Power Consumption and its Impact on Bandwidth*", Middle East University, Amman-Jordan, (2016).

2. Master thesis in computer science "*Image Steganography Technique Based on Predetermined Pattern and Histogram Analysis*", Middle East University, Amman-Jordan, (2015).

3. Master thesis in computer science "*Document Classification Method Based on Contents Using an Improved Multinomial Naïve Bayes Model*", Middle East University, Amman-Jordan, (2015).

4. Master thesis in computer science "*User Authentication System Using Emoji pictures passwords*", Middle East University, Amman-Jordan, (2015).

5. Master thesis in computer science "*Task Scheduling Using Best-Level-Job-First on Private Cloud Computing*", Middle East University, Amman-Jordan, (2016).

6. Master thesis in computer science "*Image Encryption System by Generating Chains from the Secret Key*", Middle East University, Amman-Jordan, (2016).

Training Courses & Certificates:

	Course Name	Place	Date
1.	Creative Thinking and Design Thinking	Orange	20/3/2023
2.	Innovation	Orange	19/3/2023
3.	Advanced Entrepreneurship	Orange	18/3/2023
4.	Entrepreneurship Fundamentals	Orange	16/3/2023
5.	Change Management	Orange	15/3/2023
6.	AACSB Business Accreditation Standards	Quality Assurance and Accreditation Council AArU	2-3/11/2022
7.	CISSP – Certified Information Systems Security Professional	SkillUp	21/10/2022
8.	Innovation in Delivering Computer Science & Engineering Courses: Maximize Student Learning & Instructor Time in-person/online	Wiley	7/9/2022
9.	Digital Marketing Strategy	SkillUp	3/10/2022
10.	Maharat min Google: Fundamental of Digital Marketing	Crown Prince Foundation - Jordan	8/2021
11.	Queen Rania National Entrepreneurship Competition (QRNEC) 2019 boot camp	Queen Rania Center for Entrepreneurship, Amman, Jordan	11/6/2019 – 9/7/2020
12.	Hands-on Artificial Intelligence: Microcontroller, Robotics, and IOT	Middle East University, Amman, Jordan	26/1/2020 – 27/1/2020
13.	SPARK & MEU 100-Day Entrepreneurship Bootcamp	Middle East University, Amman, Jordan	23/2/2019 – 28/4/2019
14.	Development of Academic Skills and Performance	Middle East University, Amman, Jordan	15/9/2018 – 7/10/2018
15.	Smart Coder	Pioneers, Amman, Jordan	19/8/2017
16.	Advanced course for faculty members	Middle East University, Amman, Jordan	27/9/2014 – 30/9/2014
17.	Training course to develop the performance of new faculty members	Middle East University, Amman, Jordan	8/9/2014 – 17/9/2014
18.	Arduino Microcontroller Course	Al-Zaytoonah University, Amman, Jordan	18/6/2013 – 4/7/2013

<u>*Computer Skills:*</u> Arduino Microcontroller, MCSE, WINDOWS, Mac OS, 3DS Max, Toon Boom, Final Cut Pro, MICROSOFT OFFICE, Digital Signal Processing Packages, Adobe Photo shop Packages, Programming Languages (Python, C#, JAVA, C, C++, VISUAL BASIC, ASSEMBLY Lang., etc.)

<u>Publications (Scientific Researches):</u>

<u>Note:</u> All programs that are needed to implement and test the ideas in the published papers were programmed by me, using programming languages (C#, Java, VB). The ideas in the published researches are related to many areas in the field of information technology such as Information and system security (Cryptography, Steganography, and User Authentication), Task scheduling, Information Systems, Forgery detection, Database systems, Data processing…

<u>Journals Articles:</u>

1. "*A Message Encryption Scheme Inspired by Sudoku Puzzle*", International Journal of Information and Computer Security (IJICS), Vol. 21, No. 3-4, pp. 399-413, 2023. URL: https://www.inderscienceonline.com/doi/abs/10.1504/IJICS.2023.132739

2. "*Using a DNA tape as a key for encrypt images*", Int. J. Electronic Security and Digital Forensics, Vol. 14, No. 4, pp. 373-387, 2022. URL: https://www.inderscienceonline.com/doi/abs/10.1504/IJESDF.2022.123868

3. "*Multi-round encryption for COVID-19 data using the DNA key*", International Journal of Electrical and Computer Engineering, Vol. 12, No. 1, pp. 478-488, 2022. URL: http://ijece.iaescore.com/index.php/IJECE/article/view/24142

4. "*Image Encryption using a Binary Search Tree Structure-Based Key*", International Journal of Computing and Digital System, Vol. 12, No. 1, pp. 823-836, 2022. URL: https://journal.uob.edu.bh/handle/123456789/4502

5. "*A New DNA Based Encryption Algorithm for Internet of Things*", Innovative Systems for Intelligent Health Informatics. IRICT 2020. Lecture Notes on Data Engineering and Communications Technologies, Vol. 72. pp. 786-795, Springer, 2020. URL: https://easychair.org/publications/preprint_download/VDJq

6. "*Lightweight cryptography system for IoT devices using DNA*", Computers and Electrical Engineering, Vol. 95, 2020. URL: https://www.sciencedirect.com/science/article/pii/S0045790621003827/pdfft?md5=033103bebef f38a8e6e37255c8ada97d&pid=1-s2.0-S0045790621003827-main.pdf

7. "*Secure and Lightweight Encryption Model for IoT Surveillance Camera*", International Journal of Advanced Trends in Computer Science and Engineering, Vol. 9, No. 2, pp. 1840-1847, 2020. URL: http://www.warse.org/IJATCSE/static/pdf/file/ijatcse143922020.pdf

8. "*Implementing Binary Search Tree Concept for Image Cryptography*", International Journal of Advanced Science and Technology, Vol. 130, pp. 21-32, 2019. URL: http://article.nadiapub.com/IJAST/Vol130/3.html#

9. "*Image Steganography Technique using Multilevel Hash Table*", ARPN Journal of Engineering and Applied Sciences, Vol. 14, No. 12, pp. 2286- 2292, 2019. URL: http://www.arpnjournals.org/jeas/research_papers/rp_2019/jeas_0619_7803.pdf

10. "*A secret-key image steganography technique using random chain codes*", International Journal of Technology (IJTech), Vol. 10, No. 4, pp. 731-740, 2019. URL: http://ijtech.eng.ui.ac.id/article/view/653

11. "*A New Password Authentication Scheme Resistant Against Shoulder Surfing Attack*", Journal of Technology, Vol. 34, No. 1, pp. 25-35, 2019. URL: http://jt.ntust.edu.tw/index.php/jot/article/view/683

12. "*Lightweight Cryptosystem for Image Encryption Using Auto-Generated Key*", Journal of Engineering and Applied Sciences, Vol. 13, No. 17, pp. 7418-7425, 2018. URL: http://docsdrive.com/pdfs/medwelljournals/jeasci/2018/7418-7425.pdf

13. "*A Forensic Scheme for Revealing Post-processed Region Duplication Forgery in Suspected Images*", Journal of Telecommunication, Electronic and Computer Engineering, Vol. 10, No. 3, pp. 37-45, 2018. URL: http://journal.utem.edu.my/index.php/jtec/article/view/3405/3441

14. "*Embedded key cryptosystem for cloud computing applications*", ICFNDS '18 Proceedings of the 2nd International Conference on Future Networks and Distributed Systems, Amman, Jordan — June 26 - 27, 2018. URL: https://dl.acm.org/citation.cfm?id=3231078

15. "*Image Steganography Technique Based on Extracted Chains from the Secret Key*", Journal of Engineering and Applied Sciences, Vol. 13, No. 11, pp. 4235-4244, 2018. URL: http://medwelljournals.com/abstract/?doi=jeasci.2018.4235.4244

16. "*Full Capacity Image Steganography Using Seven-Segment Display Pattern as Secret Key*", Journal of Computer Science, Vol. 14, No. 6, pp. 753-763, 2018. URL: http://thescipub.com/pdf/10.3844/jcssp.2018.753.763

17. "*A Smooth Textual Password Authentication Scheme against Shoulder Surfing Attack*", Journal of Theoretical and Applied Information Technology, Vol. 96, No. 09, 2018. URL: http://www.jatit.org/volumes/Vol96No9/15Vol96No9.pdf

18. "*Image Encryption Technique based on the Entropy Value of a Random Block*", International Journal of Advanced Computer Science and Applications, Vol. 8, No. 7, 2017. URL: http://thesai.org/Downloads/Volume8No7/Paper_35-Image_Encryption_Technique_based_on_the_Entropy_Value.pdf

19. "*A Suggested Scheme for Image Cryptography Employing Genetic Algorithm*", Journal of Theoretical and Applied Information Technology, Vol. 95, No. 11, 2017. URL: http://www.jatit.org/volumes/Vol95No11/29Vol95No11.pdf

20. "*Detection of Scaled Region Duplication Image Forgery using Color based Segmentation with LSB Signature*", International Journal of Advanced Computer Science and Applications, Vol. 8, No. 5, 2017. URL: http://thesai.org/Downloads/Volume8No5/Paper_16-Detection_of_Scaled_Region_Duplication_Image.pdf

21. "*Tasks Scheduling in Private Cloud Based on Levels of Users*", International Journal of Open Information Technologies, Vol. 5, No. 4, pp. 22-28, 2017. URL: http://injoit.org/index.php/j1/article/view/407/379

22. "*A Novel Image Encryption Algorithm Based on the Extracted Map of Overlapping Paths from the Secret Key*", RAIRO - Theoretical Informatics and Applications, Vol. 50, No. 3, July-September 2016.

23. "*A New Implementation of Text-To-Image Encryption Using Multilevel Substitution and Transposition Operations*", International Journal of Computer Science and Information Security (IJCSIS), Vol. 14 No. 9, pp. 851-857, September 2016.

24. "*Image Steganography Method Preserves the Histogram Shape of Image*", European Journal of Scientific Research, Vol. 130, No 1, pp.101 – 106, March, 2015. URL: http://www.europeanjournalofscientificresearch.com/issues/EJSR_130_1.html

25. "*MAC Address as a Key for Data Encryption*", International Journal of Computer Science and Information Security, Vol. 11, No. 11, pp. 83-87 November, 2013. URL:

https://ia601004.us.archive.org/20/items/JournalOfComputerScienceAndSecurityNovember2013/JournalOfComputerScienceIjcsisVol.11No.11November2013.pdf

26. "*Electronic Student Attendance Recording System*", International Journal of Computers & Technology, Vol. 4, No. 2, pp. 220-224, March-April, 2013. URL: http://cirworld.com/index.php/ijct/article/view/927/pdf

27. "*Message Segmentation to Enhance the Security of LSB Image Steganography*", International Journal of Advanced Computer Science and Applications, Vol. 3, No. 3, pp. 57-62, 2012.URL:http://thesai.org/Downloads/Volume3No3/Paper10-Message_Segmentation_To_Enhance_The_Security_Of_LSB_Image_Steganography.pdf

28. "*Genetic Algorithm Tool to Encrypt Image*", International Journal of Advanced Research in Computer Science, Vol. 3, No. 1, pp. 36-42, 2012. URL: http://www.ijarcs.info/?wicket:bookmarkablePage=:com.genxcellence.journal.pharmacy.web.issue.ArchivesIssueList&wicket:interface=:0:archivesissuelist:10:detail::ILinkListener

29. "*A Novel Encryption Method for Image Security*", International Journal of Security and Its Applications, Vol. 6, No. 1, pp. 1-8, 2012. URL: http://www.sersc.org/journals/IJSIA/vol6_no1_2012/1.pdf

30. "*Word-based LSB Image Steganography*", International Journal of Advanced Research in Computer Science, Vol. 2, No. 6, pp. 15-19, 2011. URL: http://connection.ebscohost.com/c/articles/78237565/word-based-lsb-image-steganography

31. "*A New Image Steganography Based on Decimal-Digits Representation*", Computer and Information Science, Vol. 4, No. 6, pp. 38-47, Canadian Center of Science and Education, 2011. URL: http://www.ccsenet.org/journal/index.php/cis/article/view/12260/8913

32. "*Using Combinational Circuits for Control Purposes*", Journal of Computer Science 5(7): 507-510, Science Publications, 2009. URL: http://thescipub.com/abstract/10.3844/jcssp.2009.507.510

33. "*Image Steganography by Mapping Pixels to Letters*", Journal of Computer Science, Vol. 5, No. 1, pp. 33-38, Science Publications, 2009. URL: http://thescipub.com/abstract/10.3844/jcssp.2009.33.38

34. "*Web-Based Management for Distributed Drug Stores*", Asian Journal of Information Technology, Vol. 7, No. 10, pp. 449-453, by Medwell Journals, 2008. URL: http://docsdrive.com/pdfs/medwelljournals/ajit/2008/449-453.pdf

35. "*Best-Job-First CPU Scheduling Algorithm*", Information Technology Journal, Vol. 6, No. 2, pp. 288-293, by Asian Network for Scientific Information, 2007. URL: http://docsdrive.com/pdfs/ansinet/itj/2007/288-293.pdf

36. "*A Tool for Compressing Images Based on Genetic Algorithm*", Information Technology Journal, Vol. 6, No. 3, pp. 457-462, by Asian Network for Scientific Information, 2007. URL: http://198.170.104.138/itj/2007/457-462.pdf

37. "*Sound Data Compression Method Using Genetic Algorithm*", Damascus Univ. Journal, Vol. 23, No. 2, 2007. URL: http://www.damascusuniversity.edu.sy/mag/eng/images/stories/3%20houseneE.pdf

38. "*Digital Watermarking Technique for Hiding Text into Image*", Damascus Univ. Journal, Vol. 22, No. 2, 2006. URL: http://www.reefnet.gov.sy/booksproject/jame3a/4handasya/206/3hidingtextintoimage.pdf

39. "*Image Encryption Using Genetic Algorithm*", Information Technology Journal, Vol. 5, No. 3, pp. 516-519, by Asian Network for Scientific Information, 2006. URL: http://www.docsdrive.com/pdfs/ansinet/itj/2006/516-519.pdf

40. "*Genetic Algorithm for Multimedia Data Security*", Journal of Computer Science (Special Issue): 99-103, 2005.

41. "(Pain Rec. 1) برمجيات السجل الطبي لمرضى ألم السرطان دراسة تطبيقية في مستشفى حازم الحافظ للأورام والطب النووي"، مجلة علوم الرافدين, المجلد15، العدد 1، 2004.

42. "دور الحاسبات الإلكترونية في رفع كفاءة النظام المحاسبي في كلية الحدباء الجامعة كنظام للمعلومات"، مجلة بحوث مستقبلية, العدد الثاني, 2000.

43. "القيمة التشخيصية في المراحل المبكرة لسرطان الثدي باستخدام قاعدة بيانات متكاملة مع عرض صوري"، مجلة أبحاث الحاسوب, العدد الثاني, المجلد الرابع, 2000.

44. "قواعد البيانات الموزعة أسلوب للتخطيط والسيطرة على موارد المستشفى"، مجلة أبحاث الحاسوب, العدد الثاني, المجلد الثالث, 1999.

45. "*Computerized Scale for Assessment of Malingering*", The First Medical Conference, Collage of Medicine at University of Mosul, Mosul-Iraq, 1999.

46. مجلة ،"تصميم نظام متكامل على الحاسبة الإلكترونية لتوزيع التركة واستخراج القسام الشرعي في قضايا المواريث"
علوم الرافدين، المجلد 10، العدد 2، 1999

47. "*Implementation of a Machine Learning System Using Developed Version Space Algorithm*", Magazine of Al-Nahrain University for Sciences, No. 1, 1996.

Conferences Articles:

1. "*Comparison Study between Classic-LSB, SLSB and DSLSB Image Steganography*", ICIT2013: The 6th International Conference on Information Technology (Cloud Computing), 8-10 May 2013. URL: http://sce.zuj.edu.jo/icit13/images/Camera%20Ready/Computers%20and%20Networks%20Security/713_final.pdf

2. "*Developed Segmented-LSB Image Steganography*", ISTEC: International Science and Technology Conference, Dubai, 13-15 December 2012, pp. 354-359. URL: http://www.istec.net/publications/istec2012.pdf

3. "*A Novel Steganography-Cryptography System*", ICCSA'10 (International Conference on Computer Science and Applications 2010), WCECS 2010 (World Congress on Engineering and Computer Science 2010), Vol. 1, pp. 120-123, 2010. URL: http://www.iaeng.org/publication/WCECS2010/WCECS2010_pp120-123.pdf

4. "*Genetic Algorithm for Compressing Sound Data*", ACIT'2005, International Arabic Conference on Information Technology, 2005. URL: http://www.acit2k.org/ACIT/index.php?option=com_content&task=view&id=125&Itemid=323

5. "*Image Compression Using Genetic Algorithm*", ACIT'2004- 5th International Arabic Conference on Information Technology, 2004. URL: http://www.acit2k.org/ACIT/index.php?option=com_content&task=view&id=116&Itemid=315