

Academic Resume



Fathy Eassa

Professor, Computer Science Department

Contact Information.

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Highest Degree.

1989, Ph.D. in Computer Science and Engineering, Software Engineering, Al-Azhar University joint supervision with University of Colorado, USA, Egypt.

Academic and Professional Experiences.

1. **2002 - Present**
Professor, fcit, kau.

Research Interests.

Intelligent software engineering, using deep learning in software engineering tasks, High performance software testing and maintenance, Using Blockchain technology in securing of software systems, Using Blockchain technology in securing SDN, Big Data security.

Teaching Interests.

Software architecture and design Ph. D course, software testing and Maintenance Ph. D course, Software engineering courses, Hardware courses and HPC architecture, Operating systems, Fault tolerance Master course, Database course.

Certifications and Trainings.

1. Recipient of ministry of higher education Grant for undergraduate studies.
2. Recipient of University of Colorado, Boulder, U.S.A. Grant for graduates Study.

Social, Scientific and Professional Affiliation.

1. -, Member, Member of Engineering Society, CAIRO-EGYPT.
2. -, Member, Member of Designers team of automation of FID system king Abdul Aziz Airport, Jeddah.
3. -, Member, Member of Designers team of AL-AZHAR University computer Network.

Publications.

1. , "", International Journal Of Data Mining & Knowledge Management Process, .
2. , "", International Journal Of Modern Education And Computer Science, .
3. , "", International Journal Of Information Technology And Computer Science, .
4. , "", International Journal Of Information Technology And Computer Science, .
5. , "", International Journal Of Modern Education And Computer Science, .
6. Saeed Musaad Altalhi, Fathy Elbouraey Eassa, Abdullah Saad Al-Malaise Al-Ghamid, Sanaa Abdullah Sharaf, Ahmed Mohammed Alghamdi, Khalid Ali Almarhabi, Maher Ali Khemakhem, "An Architecture For A Tri-Programming Model-Based Parallel Hybrid Testing Tool", Applied Sciences, vol: 13, pp. 11960, 2023.
DOI: [10.3390/app132111960](https://doi.org/10.3390/app132111960)
7. Ulaa AlHaddad, Abdullah Basuhail, Maher Khemakhem, Fathy Elbouraey Eassa, Kamal Jambi, "Ensemble Model Based On Hybrid Deep Learning For Intrusion Detection In Smart Grid Networks", Sensors, vol: 23, pp. 7464, 2023.
DOI: [10.3390/s23177464](https://doi.org/10.3390/s23177464)
8. Zaakki Ahamed, Maher Khemakhem, Fathy Eassa, Fawaz Alsolami, Abdullah Basuhail, Kamal Jambi, "Deep Reinforcement Learning For Workload Prediction In Federated Cloud Environments", Sensors, vol: 23, pp. 6911, 2023.
DOI: [10.3390/s23156911](https://doi.org/10.3390/s23156911)
9. Junaid Mohammad Qurashi, Muhammad Jawad Ikram, Kamal Jambi, Fathy Elbouraey Eassa, Maher Khemakhem, "Autonomous Vehicles: Security Challenges And Game Theory-Based Countermeasures", 2023 1st International Conference On Advanced Innovations In Smart Cities (Icaisc), pp. 1-6, 2023.
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10. Abdullah Algarni, Abdulaziz Attaallah, Fathi Eassa, Maher Khemakhem, Kamal Jambi, Hosam Aljihani, Khalid Almarhabi, Faisal Albalwy, "A Security Testing Mechanism For Detecting Attacks In Distributed Software Applications Using Blockchain", Plos One, vol: 18, pp. e0280038, 2023.
DOI: [10.1371/journal.pone.0280038](https://doi.org/10.1371/journal.pone.0280038)
11. Junaid M. Qurashi, Kamal Jambi, Fathy Eassa, Maher Khemakhem, Fawaz Alsolami, Abdullah Basuhail, "Towards Attack Modeling Technique Addressing Resilience In Self-Driving Car", Ieee Access, pp. 1-1, 2022.
DOI: [10.1109/ACCESS.2022.3233424](https://doi.org/10.1109/ACCESS.2022.3233424)
12. Abdullah Basuhail, Maher Khemakhem, Fathy Elbouraey Eassa, Junaid Mohammad Qurashi, Kamal Jambi, "N-Versions-Based Resilient Traffic Control Systems", Electronics, vol: 11, pp. 2414, 2022.
DOI: [10.3390/electronics11152414](https://doi.org/10.3390/electronics11152414)
13. Majed S. Alsayfi, Mohamed Y. Dahab, Fathy E. Eassa, Reda Salama, Seif Haridi, Abdullah S. Al-Ghamdi, "Big Data In Vehicular Cloud Computing: Review, Taxonomy, And Security Challenges", Elektronika Ir Elektrotechnika, vol: 28, pp. 59-71, 2022.
DOI: [10.5755/j02.eie.30178](https://doi.org/10.5755/j02.eie.30178)
14. Majed S. Alsayfi, Mohamed Y. Dahab, Fathy E. Eassa, Reda Salama, Seif Haridi, Abdullah S. Al-Ghamdi, "Securing Real-Time Video Surveillance Data In Vehicular Cloud Computing: A Survey", Ieee Access, pp. 1-1, 2022.
DOI: [10.1109/ACCESS.2022.3174554](https://doi.org/10.1109/ACCESS.2022.3174554)

Publications.

15. Hanan E. Alhazmi, Fathy E. Eassa, "Bcsm: A Blockchain-Based Security Manager For Big Data", International Journal Of Advanced Computer Science And Applications, vol: 13, 2022.
DOI: [10.14569/IJACSA.2022.0130364](https://doi.org/10.14569/IJACSA.2022.0130364)
16. Sultan Algarni, Fathy Eassa, Khalid Almarhabi, Abdullah Algarni, Aiiad Albeshri, "Bcnbi: A Blockchain-Based Security Framework For Northbound Interface In Software-Defined Networking", Electronics, vol: 11, pp. 996, 2022.
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17. Hanan E. Alhazmi, Fathy E. Eassa, Suhelah M. Sandokji, "Towards Big Data Security Framework By Leveraging Fragmentation And Blockchain Technology", Ieee Access, vol: 10, pp. 10768-10782, 2022.
DOI: [10.1109/ACCESS.2022.3144632](https://doi.org/10.1109/ACCESS.2022.3144632)
18. Adam Ibrahim Abdi, Fathy Elbouraey Eassa, Kamal Jambi, Khalid Almarhabi, Maher Khemakhem, Abdullah Basuhail, Mohammad Yamin, "Hierarchical Blockchain-Based Multi-Chaincode Access Control For Securing Iot Systems", Electronics, vol: 11, pp. 711, 2022.
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19. Fatmah Alanazi, Kamal Jambi, Fathy Eassa, Maher Khemakhem, Abdullah Basuhail, Khalid Alsubhi, "Ensemble Deep Learning Models For Mitigating Ddos Attack In Software-Defined Network", Intelligent Automation & Soft Computing, vol: 33, pp. 923-938, 2022.
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20. Nouf Rahimi, Fathy Eassa, Lamiaa Elrefaei, "One- And Two-Phase Software Requirement Classification Using Ensemble Deep Learning", Entropy, vol: 23, pp. 1264, 2021.
DOI: [10.3390/e23101264](https://doi.org/10.3390/e23101264)
21. Khalil Ahmad Alsulbi, Maher Ali Khemakhem, Abdullah Ahamd Basuhail, Fathy Eassa Eassa, Kamal Mansur Jambi, Khalid Ali Almarhabi, "A Proposed Framework For Secure Data Storage In A Big Data Environment Based On Blockchain And Mobile Agent", Symmetry, vol: 13, pp. 1990, 2021.
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22. M. Usman Ashraf , Fathy Alburaei Eassa, Leon J. Osterweil , Aiiad Ahmad Albeshri, Abdullah Algarni, and Iqra Ilyas, "Aap4all: An Adaptive Auto Parallelization Of Serial Code For Hpc Systems", Intelligent Automation And Soft Computing, 2021.
23. M. Usman Ashraf, Fathy Alburaei Eassa, Leon J. Osterweil, Aiiad Ahmad Albeshri, Abdullah Algarni, Iqra Ilyas, "Aap4all: An Adaptive Auto Parallelization Of Serial Code For Hpc Systems", Intelligent Automation & Soft Computing, vol: 29, pp. 615-639, 2021.
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24. Abdullah Marish Ali, Siti Mariyam Shamsuddin, Fathy E. Eassa, Faisal Saeed, Madini O. Alassafi, Tawfik Al-Hadhrani, Ahmed M. Elmisery, "Towards An Intelligent Framework For Cloud Service Discovery", International Journal Of Cloud Applications And Computing, vol: 11, pp. 33-57, 2021.
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25. Sultan Algarni, Fathy Eassa, Khalid Almarhabi, Abdulla Almalaise, Emad Albassam, Khalid Alsubhi, Mohammad Yamin, "Blockchain-Based Secured Access Control In An Iot System", Applied Sciences, vol: 11, pp. 1772, 2021.
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26. Hosam Aljihani, Fathy Eassa, Khalid Almarhabi, Abdullah Algarni, Abdulaziz Attaallah, "Standalone Behaviour-Based Attack Detection Techniques For Distributed Software Systems Via Blockchain", Applied Sciences, vol: 11, pp. 5685, 2021.
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27. Abdullah Algarni, Abdulraheem Alofi, Fathy Eassa, "Parallelization Technique Using Hybrid Programming Model", International Journal Of Advanced Computer Science And Applications, vol: 12, 2021.
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29. Adam Ibrahim Abdi, Fathy Elbouraey Eassa, Kamal Jambi, Khalid Almarhabi, Abdullah Saad AL-Malaise AL-Ghamdi, "Blockchain Platforms And Access Control Classification For Iot Systems", *Symmetry*, vol: 12, pp. 1663, 2020.
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31. Fathey Mohammed, Abdullah Marish Ali, Abdullah Saad Al-Malaise Al-Ghamdi, Fawaz Alsolami, Siti Mariyam Shamsuddin, Fathy E. Eassa, "Cloud Computing Services: Taxonomy Of Discovery Approaches And Extraction Solutions", *Symmetry*, vol: 12, pp. 1354, 2020.
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32. Fathy Elbouraey Eassa, Ahmed Mohammed Alghamdi, Seif Haridi, Maher Ali Khemakhem, Abdullah S. Al-Malaise Al-Ghamdi, Eesa A. Alsolami, "Acc_Test: Hybrid Testing Approach For Openacc-Based Programs", *Ieee Access*, vol: 8, pp. 80358-80368, 2020.
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34. Ahmed M. Alghamdi and Fathy E. Eassa, "A Parallel Hybrid-Testing Tool Architecture For A Dual-Programming Model", *International Journal Of Advanced Computer Science And Applications (Ijacs)*, 2019.
35. Ahmed M. Alghamdi and Fathy E. Eassa, "Proposed Architecture For A Parallel Hybrid Testing Tool For Dual-Programming Model", *International Journal Of Computer Science And Network Security*, 2019.
36. Saad B. Alotaibi and Fathy Elbouraey, "Towards An Efficient Topology-Aware Process Mapping For Exascale Systems", *Ijcsns*, 2019.
37. Waleed Al Shehri, Maher Khemakhem, Abdullah Basuhail, Fathy E. Eassa, "A Proposed Architecture For Parallel Hpc-Based Resource Management System For Big Data Applications", *Advances In Science, Technology And Engineering Systems Journal*, 2019.
38. Ahmed Mohammed Alghamdi, Fathy Elbouraey, "A Parallel Hybrid-Testing Tool Architecture For A Dual-Programming Model", *International Journal Of Advanced Computer Science And Applications*, vol: 10, 2019.
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40. Suhelah Sandokji and Fathy Eassa, "A Survey For Task Scheduling Frameworks For Leveraging Heterogeneous Computing Toward Exascale", *International Journal Of Computer Science & Network Security*, 2018.
41. Ebraheem M. Alhaddad, and Fathy E. Eassa, "“Biganalytic: Large-Sacle Data Management & Analysis Framework”", *International Journal Of Advanced Computer Science And Applications (Ijacs)*, 2018.

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42. Adnan A. Abi Sen, Fathy B. Eassa, Mohammad Yamin, Kamal Jambi, "Double Cache Approach With Wireless Technology For Preserving User Privacy", *Wireless Communications And Mobile Computing*, vol: 2018, pp. 1-11, 2018.
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45. Adnan Ahmed Abi Sen, Fathy Albouraei Eassa, Kamal Jambi, Mohammad Yamin, "Preserving Privacy In Internet Of Things: A Survey", *International Journal Of Information Technology*, vol: 10, pp. 189-200, 2018.
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46. M. Usman Ashraf, Fathy Alburai Eassa, Aiiad Ahmad Albeshri, Abdullah Algarni, "Performance And Power Efficient Massive Parallel Computational Model For Hpc Heterogeneous Exascale Systems", *Ieee Access*, pp. 1-1, 2018.
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47. Osama H., Fathy E., Fadi F., Amin Y., Ayman I., Leon J., "Agent-Based Managing For Grid Cloud System - Design And Prototypal Implementation", *International Journal Of Advanced Computer Science And Applications*, vol: 8, 2017.
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48. Abdullah Al-Shomrani, Fathy Eassa, Kamal Jambi, "A Framework To Secure Big Data Storage", *Journal Of Computational And Theoretical Nanoscience*, vol: 14, pp. 5600-5605, 2017.
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DOI: [10.5120/15348-3689](https://doi.org/10.5120/15348-3689)
55. Fathy Eassa, Mostafa Saleh, "Web Services Based Integration Tool For Heterogeneous Databases", , vol: 1 Issue 3, pp. 16-26, 2013.

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56. Fathy Eassa, "Imatt: An Integrated Multi-Agent Testing Tool For The Security Of Agent-Based Web Applications", , 2013.
57. Naif Aljabri, Fathy Eassa, "Scheduling Manager For Mobile Cloud Using Multi_Agents", , vol: 02-Issue 03, 2013.
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59. Bassma S. Alsulami, Maysoon F. Abulkhair, Fathy Eassa, "Semantic Clustering Approach Based Multi-Agent System For Information Retrieval On Web", , vol: Vol. 2 No.1, 2012.
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62. Ashwaq Maghraby, Fathy Eassa, Mostafa Saleh, "Gis Based On Mobile Agent And Ontology", , 2011.
63. Amin Noaman, S. Gamal, F. Essia A. Ezz, M. Salah, Mostafa Saleh, Shihab Gamaleldin, Fathy Eassa, "Developing An Author'S Request Manager Of Style-Based E-Learning", International Conference Of E-Learning And Distance Education, 2011.
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66. Ebtehal Alsaggaf, Fathy Eassa, "Use Of Agents In Building Integration Tool For Component-Based Applications", 2nd International Conference On Software Engineering And Computer Systems (Icsecs), 2011.
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71. Shihab Gamaleldin, Mostafa Saleh, Fathy Eassa, Others, "Building An E-Learning Content Management Framework", , 2009.
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74. O. A. Abulnaja, F. E. Eassa, "Dynamic Tester For Object-Oriented Systems", Al Azhar University Engineering Journal, vol: 2, no. 3, pp. 180-186, 1999.

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75. F. E. Eassa, O. A. Abulnaja, "A Practical Object-Oriented Systems Testing With Assertion Language", Al Azhar University Engineering Journal, Faculty Of Engineering, Al Azhar University, Vol. 2, No. 2, April 1999, vol: 2, no. 2, pp. 101-116, 1999.