

HANAN MOHAMED MOUSSA

Assistant Professor in Information Systems

Information Systems Assistant Professor and Professional IT Expert with more than 30 years of insightful experience

Acknowledged Academic Assistant Professor | Shaping Delivery Management

NOTEWORTHY PROFESSIONAL CONTRIBUTIONS

*~ Acknowledged Academic Assistant Professor in Information Systems & Software Engineering~
~Significant contributor in quality delivery of project assignments throughout professional tenure ~*

AREAS OF EXPERTISE

Research areas in:

*Software Project/Product Management
(Traditional and Agile)
Software Development Methodologies
Software Engineering
Management Information Systems
Quality Assurance & Control
Frameworks
Software Metrics & Estimation
Process Management & Improvement*

*Undergraduate and post-graduate Teaching
Post-graduate Thesis Supervision
Academic qualitative and quantitative Research*

*Academic Activities such as
Curriculum quality improvement
Summer internship organization
Employment skills improvement
for students*

EXECUTIVE SYNOPSIS

- Combining both academic and professional expertise in Information Systems & Software Engineering
- Currently an Assistant Professor of Information Systems – The American University in Cairo
- Acknowledged for high-quality content and sophisticated pedagogy
- Articulate communicator with ability to blend technical expertise with interpersonal skills while interacting with students

EDUCATION

- PhD in Information Systems – Faculty of Computers and Artificial Intelligence, Cairo University - 2011.
Thesis topic is “Effort Estimation in Software Projects”.
- M.Sc. in Computer Science - American University in Cairo - 2001.
- Diploma in Computer Science (Honors) - CACE, American University in Cairo - 1995.
- B.A. in Business Administration (High Honors) - American University in Cairo - 1992.

ACADEMIC CAREER GRAPH

Assistant Professor – Information Systems
The American University in Cairo
Onsi Sawiris School of Business

COURSES TAUGHT

The American University in Cairo - 2022- Present

Undergraduate Courses

Database Management
Introduction to Management Information Systems
IT Project Management
Quality Assurance & Software Testing

Faculty of Computers & Artificial intelligence – Cairo University 2010-2022

Undergraduate Courses

IS Quality Assurance
IT Project Management
Information Systems Fundamentals
Professional Software Engineering Practices
Software Engineering
Requirements Engineering
Database Management
Human Computer Interaction
File Organization & Retrieval
Management Fundamentals
Introduction to Economics

Post-graduate Courses

Advanced Information Systems Engineering – M.Sc. Level
Requirements Engineering – M.Sc. Level
Software Management – M.Sc. Level
IS Development Methodologies – Ph.D. Level

Theses Supervision

Measuring Similarity between Requirements – M.Sc. 2016
Enhancing Agile Projects Estimation – M.Sc. 2019
Agile Projects Management for Critical Systems Development – M.Sc. 2021
Credibility Assessment for Sources of Fake News – Ph.D. 2022
Automated Anomaly Detection in DevOps using Machine Learning – M.Sc. 2023
Requirements Elicitation & Prioritization for Software Products – In the process of Thesis writing – Ph.D (2026)
Enhancing Software Effort Estimation Using Machine Learning – In the process of Thesis writing – M.Sc (2026)

Arab Academy for Science, Technology & Maritime Transport - 2013 and 2019

Undergraduate Courses

- Introduction to Programming with C Language
- Database Management

American University in Cairo – CACE- 2002 –2004.

Training Courses

- Database Fundamentals
- Information Systems Fundamentals
- eGovernment services
- Management Fundamentals
- Change Management

HP Enterprise Services Egypt- 2006- 2016

Training Courses

- Project management
- Projects Metrics & Estimation
- Quality management
- Service Operations Management
- Process Improvement

Global Knowledge – 2019- 2023

Training Courses

- Project Management Fundamentals
- Project Management Professional – PMP Boot Camp

- Introduction To Agile and Scrum Workshop
- Project Portfolio Management
- Business Analysis Essentials
- IT Risk Management
- Negotiation Skills for Project Managers
- Critical Thinking

DXC Technology - 2020- 2022

Training Courses

- Agile Project Management
- Agile Software Development and DevOps
- Estimation in Agile Projects
- Software Development Lifecycle
- Presentation skills

RESEARCH IN PROGRESS

- 1- Enhancing Software Effort Estimation for Agile Projects Using ML: A Function Point-Based Approach
 - 2- Leveraging LLMs in Design Thinking and Automating Persona Creation
 - 3- Assessing Impact of the Branching Strategy on Build Success for Software Projects
 - 4- Software Products Feature Selection - Application on Plastic Bank
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PUBLICATIONS

1. **Moussa, H.**, Galal-Edeen, G. H., and Kamel, A. (2009). "Enhancing Software Sizing Adjustment Factors." Fourth International Conference on Intelligent Computing & Information Systems - ICICIS, ACM, Cairo, Egypt. (**Awarded the session best-presented paper prize**).
2. **Moussa, H.**, Galal-Edeen, G. H., and Kamel, A. (2009). "Building an Effort Estimation Model for Software Projects." International Journal of Intelligent Control and Systems 14(4): 244-258.
3. **Moussa, H.**, Galal-Edeen, G.H., and Kamel, A. (2010). Applying an Estimation Framework in Software Projects-A local Experience. The 7th International Conference on Informatics and Systems - INFOS 2010, Cairo, Egypt.
4. **Moussa, H.**, Galal-Edeen, G.H., and Kamel, A. (2010). "Lessons Learned from Building an Effort Estimation Model for Software Projects." The International Journal of Software Engineering. 3(2): 3-20.
5. Ezat, E., Kamel, A., **Moussa, H.** and Mihany, F. (2016). "A Framework to Measure Similarity between Requirements." The 10th International Conference on Informatics and Systems - INFOS 2016 Cairo, Egypt: 334-335.
[DOI: 10.1145/2908446.2908510](https://doi.org/10.1145/2908446.2908510)
6. Ilyas, M., Kamel, A., and **Moussa, H.** and Mihany, F. (2016). "An Automated System for Measuring Similarity between Requirements." The 2nd Africa and Middle East Conference: 46-51.
[DOI: 10.1145/2944165.2944173](https://doi.org/10.1145/2944165.2944173)
7. Gaffar, Nisma. **Moussa, H.** Kamel, A. and Galal-Edeen (2018). "A Proposed Framework for Enhancing Story Points in Agile Software Projects." Indian Journal of Science and Technology. ISSN 0974 -5645.
[DOI: 10.17485/ijst/2018/v11i31/128780](https://doi.org/10.17485/ijst/2018/v11i31/128780)
8. Mounir, M., Salah, A., Kamel, A. and **Moussa, H.** (2020). "Framework to Measure Agile Software Process Effectiveness in Critical Systems Development". Proceedings of the 2020 9th International Conference on Software and Information Engineering (ICSIE 2020). ACM, New York, NY, USA, 25-32.
[DOI: 10.1145/3436829.3436853](https://doi.org/10.1145/3436829.3436853)
9. Gaber, A., Nour, M. and **Moussa, H.** (2021). "A Multi-dimensional Credibility Assessment for Arabic News Sources". International Journal for Advanced Computer Science and Applications (IJACSA) - Volume 12 Issue 9.
[DOI: 10.14569/IJACSA.2021.0120935](https://doi.org/10.14569/IJACSA.2021.0120935)
10. Gaber, A., Nour, M. and **Moussa, H.** (2021) "SMAD: Text Classifications of Arabic Social Media Dataset for News Sources". International Journal for Advanced Computer Science and Applications (IJACSA) - Volume 12 No 10.
[DOI: 10.14569/IJACSA.2021.0121058](https://doi.org/10.14569/IJACSA.2021.0121058).
11. Fawzy, A., Wassef, K. and **Moussa, H.** (2023). "Framework for Automatic Detection of Anomalies in DevOps." Journal of King Saud University - Computer and Information Sciences - Volume 35 Issue 3.
[DOI: 10.1016/j.jksuci.2023.02.010](https://doi.org/10.1016/j.jksuci.2023.02.010)
12. **Moussa, H.** and Galal-Edeen, G. (2023). "Design Thinking Using Qualitative Data Analysis and Machine Learning". The 13th International Conference on Information Communication and Management - ICICM 2023.
[DOI: 10.1145/3640429.3640437](https://doi.org/10.1145/3640429.3640437).

13. Galal-Edeen, G. and **Moussa, H.** (2024). "Leveraging Generative AI in Information Systems Development". Proceedings of the 29th UK Academy for Information Systems (UKAIS) International Conference. University of Kent 25th-26th April 2024.
14. Mihany, F. A., Galal-Edeen, G. H., Hassanein, E. E., & **Moussa, H.** (2025). Data-Driven Requirements Elicitation from App Reviews Framework Based on BERT. Applied Sciences, 15(17), 9709.
[DOI: 10.3390/app15179709](https://doi.org/10.3390/app15179709).
15. Mihany, F. A., Galal-Edeen, G. H., Hassanein, E. E., & **Moussa, H.** (2026). Data-driven requirements prioritization framework for app reviews. *Inventions*, 11(2), 33. <https://doi.org/10.3390/inventions11020033>

CONSULTANCY

Program Evaluator (PEV) for the Computer Science Commission (CAC)

Accreditation Board for Engineering and Technology - ABET

AWARDS

Awarded best Ph.D. Thesis for Information Systems in Cairo University for the year of 2011

Winning the First place in Process Improvement - Service Innovation Campaign 2015- Application & Business Services - EMEA – HP Enterprise

CERTIFICATIONS

- MIT Professional Education Program “No Code AI and Machine Learning: Building Data Science Solutions” - 2025.
- ITIL Intermediate Service Design V.3. -2015.
- ITIL Intermediate Service Operations V.3. -2013.
- ITIL Foundation V.3. -2010.
- Project Management Professional - PMP -2005.
- IBM RS/6000 Solution Sales Certificate-2001.

PROFESSIONAL EXPERIENCE

- DXC Technology – Digital Applications Operations Manager – 3 years
- DXC Technology – Senior Program Manager – 3 years
- IT Worx Gulf - Senior Project Manager – 1 year
- CIB – Senior Project Manager – 2 years
- HP – Senior Delivery Manager – 10 years
- Raya IT – Projects Governance – 2 years
- IBM – Systems Presales Specialist – 5 years
- IBM – Software Developer – 2 years
- IDSC – Quality Officer – 3 years

Languages: English and Arabic
