Personal Website

MOAMEN ZAHER

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Master's holder specialized in Human-Computer Interaction (HCI) with several published research papers in both journals and conferences. I'm also an experienced Teaching Assistant with 4 years of instructing diverse Software Engineering courses, including Web development, Object-Oriented programming, Machine learning, HCI, Service-Oriented Architecture and more. Also, worked as a Senior Software Engineer for 3 years, bringing practical market experience.

EXPERIENCE

OCT 2024 - NOW
ASSISTANT LECTURER, MODERN SCIENCES AND ARTS (MSA) UNIVERSITY, EGYPT

MAR 2020 – SEP 2024
TEACHING ASSISTANT, MODERN SCIENCES AND ARTS (MSA) UNIVERSITY, EGYPT

Instructed a variety of Software Engineering courses, offering guidance to senior-level students during their capstone projects. Contributed actively to numerous interdisciplinary initiatives and collaborations.

OCT 2023 - NOW
TEACHING ASSISTANT, ESLSCA UNIVERSITY, EGYPT

Instructed a variety of Software Engineering courses including data structures, mobile programming and OOP in addition to guidance to senior-level students during their capstone projects.

MAR 2021 – DEC 2023
SENIOR SOFTWARE ENGINEER, ISTUDY

Developing Various API Services.

AUG 2016 – SEP 2017
TRAINEE, VODAFONE

FEB 2017 - MAR 2017
TRAINEE, TECHNOLOGY INNOVATION AND ENTREPRENEURSHIP CENTER (TIEC).

EDUCATION

JAN 2025 - DEC 2029
PH.D. SOFTWARE ENGINEERING, LUT UNIVERSITY - FINLAND

NOV 2020 - JUL 2024
M.SC. COMPUTER SCIENCE, HELWAN UNIVERSITY - EGYPT

Collaborated on a project focusing on integrating human activity recognition techniques into physical rehabilitation.

JUN 2014 - JUN 2018
BA.SC. COMPUTER SCIENCE, HELWAN UNIVERSITY - EGYPT

Department of Software Engineering, GPA: 3.2

FEATURED PUBLICATIONS

- Zaher, M., Ghoneim, A. S., Abdelhamid, L., & Atia, A. (2025). Fusing CNNs and attention-mechanisms to improve real-time indoor Human Activity Recognition for classifying home-based physical rehabilitation exercises. Journal of Computers in Biology and Medicine. Elsevier. https://doi.org/10.1016/j.compbiomed.2024.109399
- Zaher, M., Ghoneim, A. S., Abdelhamid, L., & Atia, A. (2024). Unlocking the potential of RNN and CNN models for accurate rehabilitation exercise classification on multi-datasets. Journal of Multimedia Tools and Applications. Springer https://doi.org/10.1007/s11042-024-19092-0
- Zaher, M., Samir, A., Ghoneim, A., Abdelhamid, L., & Atia, A. (2023, July). A Framework for Assessing Physical Rehabilitation Exercises. In 2023 Intelligent Methods, Systems, and Applications (IMSA) (pp. 526-532). IEEE. https://doi.org/10.1109/IMSA58542.2023.10217392
- Amgad, N., Ahmed, M., Haitham, H., Zaher, M., & Mohammed, A. (2023, July). A Robust Ensemble Deep Learning Approach for Breast Cancer Diagnosis. In 2023 Intelligent Methods, Systems, and Applications (IMSA) (pp. 452-457). IEEE. https://doi.org/10.1109/IMSA58542.2023.10217501

CERTIFICATIONS

- DeepLearning.AI: Deep Learning Specialization – July 2024
- DeepLearning.AI: Natural Language Processing Specialization – June 2024
- DeepLearning.AI: Generative Adversarial Networks (GANs) Specialization – June 2024
- 4 AWS Badges: Introduction to Cloud 101 and Getting Started with (Computer, Storage, and Networking).
- Microsoft Certified: Azure AI Fundamentals – 22 Aug 2021.

SKILLS

- Deep understanding of Applying OOP principles to develop modular, maintainable, and scalable software solutions in Java, php, Python and C#.
- Skilled in machine learning workflows, utilizing TensorFlow and scikit-learn to create and deploy AI models for diverse tasks such as classification and HAR. Familiarity with Unity.
- Experienced in image analysis with OpenCV, adept at preprocessing, feature extraction, object detection, AR, and deploying deep learning models for image-related tasks.
- Proficient in full-stack web development, utilizing different stacks such as LAMP. Skilled in building RESTful APIs and integrating third-party services for seamless user experiences.