Ahmed H. Shahin

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EDUCATION

University College London

London, UK

PhD in Computer Science Mar. 2020 - Present

Nile University

Giza, Egypt

MSc in Informatics; GPA: 3.93

Oct. 2017 - Dec. 2019

Mansoura University

Mansoura, Egypt

Mar. 2020 - Present

BSc in Biomedical Engineering; GPA: 3.74 (Class Rank: 1st)

Sept. 2012 - July. 2017

Experience

PhD Student

University College London

London, UK

o Supervisors: Prof. Daniel Alexander and Prof. David Barber

o Topic: Machine Learning for High-Resolution Lung Image Analysis

- Full scholarship funded by the Open Source Imaging Consortium (OSIC)
- Participated in the organisation of the first OSIC Kaggle challenge for predicting Idiopathic Pulmonary Fibrosis progression Link
- Supervised students in the COMP0016 course with the following projects (Autumn 2020 & Winter 2021):
  - \* NHS at Home initiatives with the RCGP (in collaboration with the NHS and GOSH DRIVE)
  - \* IBM FISE v2 Open Source Apps social isolation assistance with simplified calling (in collaboration with IBM)
  - \* IBM3 Open Source Federated "alexa" like devices "Ask Bob" (in collaboration with IBM)
  - \* Unbounded evaluation of sequences in videostream events

**Data Science Systems** 

London, UK

Machine Learning Consultant

Oct. 2020 - Feb. 2021

• Supported a private project related to exploring AI methods for lung image analysis

Cairo, Egypt Intixel

Senior Machine Learning Engineer

Nov. 2019 - Mar. 2020

• Worked on developing deep learning algorithms for chest abnormalities detection and localization from X-Ray scans

Inception Institute of Artificial Intelligence (IIAI)

Abu Dhabi, UAE

Mar. 2019 - Aug. 2019

Research Intern

o Line manager: Dr. Shadab Khan

 Worked on weakly supervised methods for class-agnostic medical image segmentation to alleviate data scarcity problem

Giza, Egypt Nile University

Research Assistant

Oct. 2017 - Feb. 2019

- o Supervisor: Dr. Mustafa Elattar
- Worked on applications of deep neural networks in medical image segmentation and diagnosis
- o Taught CSCI304 Design and Analysis of Algorithms course for undergraduates

Mansoura University

Mansoura, Egypt

Teaching Assistant

Feb. 2018 - Jun. 2018

• Taught COM123 Electronic Measurements course for undergraduates

Moussa Academy

Online

Instructor, Freelancer Aug. 2015 - Jun. 2018

o Taught the following courses through online tutorials for university students: Math251 Linear Algebra, Stat201 Quantitative Methods, Math150 Discrete Mathematics, Stat101 Statistics and Probability.

## **PUBLICATIONS**

- S Khan\*, AH Shahin\*, J Shen, L Shao, "Extreme Points Derived Confidence Map as a Cue For Class-Agnostic Interactive Segmentation Using Deep Neural Network", International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI'19), 66-73. (early acceptance, travel award, \*=equal contribution)
  Link
- AH Shahin, K Amer, MA Elattar, "Deep Convolutional Encoder-Decoders with Aggregated Multi-Resolution Skip Connections for Skin Lesion Segmentation", 2019 IEEE 16th International Symposium on Biomedical Imaging (ISBI'19), 451-454. Link
- AH Shahin, A Kamal, MA Elattar, "Deep Ensemble Learning for Skin Lesion Classification from Dermoscopic Images", 2018 9th Cairo International Biomedical Engineering Conference (CIBEC'18), 150-153. Link
- AH Shahin, P Munjal, L Shao, S Khan, "FAIRS: Soft Focus Generator and Attention for Robust Object Segmentation from Extreme Points", Arxiv preprint. Link
- G Ali, **AH Shahin**, M Elhadidi, MA Elattar, "Convolutional Neural Network with Attention Modules for Pneumonia Detection", 2020 International Conference on Innovation and Intelligence for Informatics, Computing and Technologies (3ICT), 1-6. <u>Link</u>

## SCHOLARSHIPS AND AWARDS

- Full scholarship funded by OSIC for PhD at UCL, 2020
- MICCAI Graduate Student Participation Award, Online, 2020
- MICCAI Graduate Student Travel Award, Shenzhen, China, 2019
- Full scholarship funded by Banque Misr for master's degree at Nile University, 2017

## Volunteering

- Reviewer for the International Journal of Computer Vision (IJCV)
- Reviewer for the Novel Intelligent and Leading Emerging Sciences Conference (NILES'19)
- Mentored an undergraduate intern at the centre for informatics sciences, Nile University

## SKILLS

- **Programming Languages**: Python (proficient), familiar with C++, Matlab
- Data Science Libraries: PyTorch, Keras, Numpy, Pandas, Sickit-learn
- Languages: English (proficient), Arabic (Native)