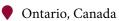
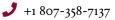
Gad Gad

Github

☑ ggad@lakeheadu.com









Education

2021 – 2023 MSc Computer Science, Lakehead University, ON, Canada

Thesis student - Research and teaching Assistant

2015 – 2021 **BSc Computer Engineering, Nile University, Egypt**

Merit-based full scholarship for academic performance (CGPA: 3.88)

Experience

Sept. 21 - Present Research Assistant, Lakehead University.

Conducting research in ACCESS research group on federated learning, knowledge distillation, and differential privacy.

Apr. 21 - Aug. 21 Software Engineer, Delta-care.

Developed python backend of an automatic microscope. Developed deep learning models to automate semen motility and morphology tests.

Sept. 20 - Jul. 21 Software Intern, Vortex.

Software development for Vortex RoboSub 2021 competition Autonomous Underwater Vehicle (AUV) team. Designed and implemented collaborative ROS nodes for amount underwater detection and motion planning.

smart underwater detection and motion planning.

Nov. 20 - May 21 Machine Learning Intern, UN ESCWA.
Satellite imagery analysis for urban development.

Research Publications

Journal Articles

- **G. Gad** and Z. Fadlullah, "Federated learning via augmented knowledge distillation for heterogenous deep human activity recognition systems," *Sensors*, vol. 23, no. 1, p. 6, 2023.
- **G. Gad**, E. Gad, K. Cengiz, Z. Fadlullah, and B. Mokhtar, "Deep learning-based context-aware video content analysis on iot devices," *Electronics*, vol. 11, no. 11, p. 1785, 2022.

Conference Proceedings

- **G. Gad**, G. Eyad, and B. Mokhtar, "Towards optimized iot-based context-aware video content analysis framework," in *IEEE 7th World Forum on Internet of Things*, 2021.
- **G. Gad**, A. Annaby, M. Saeed, and N. Negied, "Real-time lane instance segmentation using segnet and image processing," in *IEEE Novel Intelligent and Leading Emerging Sciences*, 2020.

Talks and Presentations

G. Gad and Z. M. Fadlullah, Applying computer vision and deep learning to semen morphology and motility analysis, Oct. 2021.

Skills

Languages

English, Arabic.

Coding

Python, C++, Numpy, Keras, Pytorch, sklearn, Pandas.

Cloud Services

AWS ML services and resources.

Miscellaneous Experience

Awards and Achievements

2021 Vector Institute AI scholarship recipient. Awarded by Vector Institute.

Best Poster Award, NRSC 2020 conference.

■ 3rd place in IT & CS track, Egyptian junior researcher competition.

2019 st place in "Networking" course project, Undergrad Research Forum.

Certification

2021 AWS certified ML specialist. Awarded by Amazon.

Software Testing MicroMaster. Awarded by University of Maryland University College.

Advanced data analysis nanodegree. Awarded by Udacity.

2020 TensorFlow developer professional Cert. Awarded by Google.

Deep learning specialization. Awarded by deeplearning.ai

References

Available on Request