ALAAELDIN EL-NOUBY

Website : http://aelnouby.github.io/ | Github : http://github.com/aelnouby/ | Email : alaaelnouby@gmail.com

EDUCATION

UNIVERSITY OF GUELPH ONTARIO, CANADA
MASc. Engineering Systems and Computing
Expected April 2019 | Current
GPA: 4

AIN SHAMS UNIVERSITY CAIRO, EGYPT
B.E. Computers and Systems Engineering
August 2016 | Grade: Distinction

COURSEWORK

GRADUATE
- Machine Learning (A+)
- Deep Learning (A+)
- Machine Vision (Ongoing)
- Computational Statistics (Ongoing)

MOOCS
- Algorithms course by Princeton [Coursera]
- Text retrieval and Search engines course by University of Illinois [Coursera]
- Computer vision course by Gerorgia Tech [Udacity]
- Graduate Machine learning course by CMU.
- Stanford's CS231n course.
- Stanford's Machine Learning Course [Coursera]

SKILLS

PROGRAMMING LAN-GUAGES
Strong : Python • C/C++ • C#
Familiar : JAVA• Ruby • MATLAB • Javascript

FRAMEWORKS
Strong : Pytorch • OpenCV
Familiar : Tensorflow • Caffee • CNTK • Android • Rails • DotNet

AWARDS & CERTIFICATES
- Winner of Boot-up web development competition.
- TOEFL IBT English test (110/120).
- Top 5% of my class.

EXPERIENCE

GRADUATE RESEARCH ASSISTANT | Machine Learning Research Group, School of Engineering, University of Guelph
Expected September 2017 – April 2019 | Guelph, ON, Canada
- Advised by Dr. Graham Taylor.
- Conducting research related to using deep learning for better video understanding and Human activity recognition and detection.
- Research funded by the DeepVision project.

RESEARCH SOFTWARE DEVELOPMENT ENGINEER | Microsoft
Advanced Technology Lab Cairo | NLP
August 2016 – August 2017 | Cairo, Egypt
- Worked on developing a task oriented virtual agent that is employed on the customer support task. My focus was on developing engineering pipelines that automates the extraction of answers from different sources (web pages, click through logs, ...).
- Developed an engineering pipeline for large scale semantic clustering from click through logs to discover the most trending intents from logs.
- Built a semantic role labeler for better logs understanding.

COMPUTER VISION ENGINEERING INTERN | AvidBeam Technologies
June 2015, September 2015 | Cairo, Egypt
- Worked as a part of the Face Recognition team, I was responsible for the "Face Landmarks extraction and classification" sub-project, I have used Active shape models to solve this problem using openCV.

BACHELORS THESIS | Ain Shams University
September 2015, August 2016 | PDF
- The project was about Action Detection for Surveillance systems. I worked with classical machine learning models such as SVMs and GMMs with STIP features. Additonally, I worked with Deep CNNs following the "Finding Action Tubes" paper.

TEACHING

CIS*3110 Operating Systems
Teaching Assistant | Winter 2018 | University of Guelph
CSE*121 Fundamentals of Programming
Teaching Assistant | Winter 2017 | Ain Shams University

OPEN-SOURCE CODE

Pytorch implementation of Generative Adversarial Text-to-Image Synthesis paper
57 stars | Code | PDF
Implementation for the proposed architecture in the paper, in addition to some of the GANs training tricks such as feature matching, minibatch-discrimination, label smoothing. I also implemented WGAN and WGAN-GP. These techniques helped with stabilization of training and avoiding mode collapse.

PUBLICATIONS

"Real-Time End-to-End Action Detection with Two-Stream Networks"
Alaaeldin El-Nouby, Graham W. Taylor | Under review for CRV | PDF