

Badr ALKHAMISSI

Machine Intelligence Research Assistant

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🔗 <http://bkhmsi.github.io> 🐙 github.com/bkhmsi in [linkedin.com/in/bkhmsi](https://www.linkedin.com/in/bkhmsi)

📍 11 el-Fardous St., al-Agouza, Giza 12411 📅 Born on 28 August 1995 (23 years) in Cairo, Egypt



🎓 EDUCATION

June 2018 September 2014	The American University in Cairo, BACHELOR OF SCIENCE, Cairo, Egypt <ul style="list-style-type: none">➤ BSc. in Computer Science - Summa Cum Laude. GPA 4.0➤ President's Cup and Mohamed El Beleidy Academic Award for Class Valedictorian.➤ Mohammed Bin Abdulkarim A. Allehedan Award for highest performing STEM student.➤ Academic Achievement Scholarship.➤ Thesis : Video Search using Natural Language.
July 2017	Tsinghua University, DEEP LEARNING SUMMER SCHOOL, Beijing, China <ul style="list-style-type: none">➤ Thorough training in deep learning, covering many applications in Computer. Vision, NLP, Knowledge Graph, Social Media Analysis, Multimodal Analysis and Robotics.➤ Outstanding Performance Award in Deep Learning Summer School at Tsinghua University.
December 2016 August 2016	Stony Brook University, SEMESTER ABROAD, New York, United States <ul style="list-style-type: none">➤ Coursework : Specializing in Computer Vision and Artificial Intelligence.➤ Best Junior Award in Stony Brook ACM Regional Qualification Contest.➤ Abdallah Jum'ah Study Abroad Scholarship.
June 2014 September 2011	Manor House School, IGCSE, Cairo, Egypt <ul style="list-style-type: none">➤ International General Certificate of Secondary Education (IGCSE).➤ High Achiever Award in Cambridge AL Computing.➤ Advanced Levels in Computing, Mathematics and Arabic (A*, A, A) and Advanced Subsidiary Levels in Physics and Chemistry (A, A).

👛 INDUSTRIAL AND RESEARCH EXPERIENCE

Present January 2018	Machine Intelligence Research Assistant, VKANSEE, Cairo, Egypt <ul style="list-style-type: none">➤ Conducting research for Vkansee to improve state-of-the-art algorithms in bio-metrics through ML➤ Optimize implementations for speed and space to suit embedded devices with restricted resources➤ Assist in data collection, labeling, and preprocessing➤ Work with and support engineers from leading mobile phone and device manufacturers to integrate Vkansee solutions into industry standard platforms <div>KerasTensorflowPythonC++QT</div>
September 2018 June 2018	Software Engineer, MICROSOFT ADVANCED TECHNOLOGY LAB IN CAIRO, Cairo, Egypt <ul style="list-style-type: none">➤ Researching the applicability of multilingual bot-interaction through Machine Translation➤ Mentoring Summer Intern➤ Developed Node CLI tool for MS Language Generation, part of Bot-Framework tools.➤ Collaborating with Microsoft Beijing for designing and developing core components part of MS Language Generation➤ Incorporate Machine Translation into MS Bot-Framework <div>Visual StudioC#NodeJSJavaScriptTypeScriptPython.NETMT</div>
Fall '15 & '17 & Spring '16	Undergraduate Teaching Assistant, THE AMERICAN UNIVERSITY IN CAIRO, Cairo, Egypt <ul style="list-style-type: none">➤ Teaching assistant for Practical Machine Deep Learning➤ Teaching assistant for Programming Fundamentals➤ Hold regular office hours to help students➤ Give sessions/workshops to assist students with their coursework <div>C++PythonTensorflowKerasSFML</div>

Winter '16
& Summer '15

Software Development Engineer Intern, MICROSOFT ADVANCED TECHNOLOGY LAB IN CAIRO, Cairo, Egypt

- Supporting full-text search for MS Language Understanding Intelligent Service (LUIS) utterances
- Migrating existing LUIS database from Azure to MS SQL Server and adjusting LUIS features that uses this database accordingly
- Design and implement the application import/export feature on LUIS
- Developing different applications (iOS, Windows Phone and an Office Extension) that utilizes LUIS

C# F# Swift Objective-C iOS Windows Phone .NET Visual Studio Xcode

PROJECTS

VIDEO SEARCH USING NATURAL LANGUAGE

SEPTEMBER 2017 - MAY 2018

github.com/bkhmsi/forget-me-not

Undergraduate Thesis Project. In this research, we propose a framework for searching long untrimmed videos for segments that logically correlate with a natural language query. We develop a new method that exploits state-of-the-art deep learning models on the temporal-action-proposal task, dense captioning of events in videos and pre-trained models that produce highly generic sentence representations to be able to retrieve video segments that corresponds to an input query.

Python PyTorch Tensorflow Keras Computer Vision NLP

SKETCH INVERSION USING DEEP CONVOLUTIONAL NEURAL NETWORKS

MAY 2017

github.com/bkhmsi/sketchback

Synthesising photo-realistic images from pencil sketches of human faces and architectural drawings of buildings through the use of deep convolutional neural networks.

Python Tensorflow Keras Computer Vision

ARM THUMB ASSEMBLER AND SIMULATOR

SUMMER 2016

[ARM Thumb Simulator](#)

Web application that allows you to assemble and simulate programs intended for the ARM Thumb ISA. It was created so students taking the Assembly and Computer Organization course can use it for their assignments and projects. It supports many features including debugging and GFX display.

AngularJS JS HTML CSS Firebase

SKILLS

PROGRAMMING LANGUAGES

Proficient C++, C, Python, JavaScript, TypeScript, C#, Java, SQL, Matlab, HTML, CSS
Prior Experience Swift, Objective-C, F#, Elm, Ruby, Visual Basic, PHP, Verilog

FRAMEWORKS & TECHNOLOGIES

Proficient Tensorflow, Keras, PyTorch, NodeJS, iOS Development, AngularJS, Processing, Matlab, Octave, Microsoft.NET, SFML, Xcode, Visual Studio, Git, QT
Prior Experience Android Development, Windows Phone Development, Messenger Bot Development, Alexa Development, Unity, Arduino, Ruby on Rails, Oracle, MS SQL Server, Firebase, Xilinx

OTHER AWARDS

- Dean's list from Fall '14 till Spring '18 - The American University in Cairo '14 - '18
- Computer Science Exemplary Student - The American University in Cairo '18
- Highest-GPA Award for Expected to Graduate - The American University in Cairo '18
- Third Place Amazon Innovation Hackathon - The American University in Cairo '18
- Highest-GPA Award for Juniors - The American University in Cairo '17
- Second Prize in Amazon Alexa Hackathon - The American University in Cairo '17
- High Achiever in CS1101 Course - The American University in Cairo '15
- Second Place in Common Reading Program Essay Contest - The American University in Cairo '14

LANGUAGES

Arabic ● ● ● ● ●
English ● ● ● ● ●
French ● ● ○ ○ ○

+ ACTIVITIES AND VOLUNTEERING

- Participated in several competitive programming contests including Google Hash Code, Facebook Hacker Cup and more. Qualified to ACM ECPC representing AUC, June '15 - Present
- Associate Head of the Computer Science and Engineering Association academics committee at AUC, responsible for organizing academic events and workshops, Spring '17
- Co-Founded Creative Coding Cairo under FabLab Egypt. Organize monthly meet-ups for the community, Juyl '16 - Sep '17
- Developed a Database System for Doum Cultural Foundation using MS Access VB and SQL. Sending HTML emails for Doum's News-list. Managing their website and their digital presence. Volunteer in organizing some of their workshops and cultural events, Cairo, September '12 - May '16
- Member of the academic committee in the Astronomy Club at AUC, assisted in the organization of the 2nd Astronomy Conference in AUC, Fall '14.
- Member of the CISV Egyptian delegation. Participated in organizing a summer camp in Paris, basing activities on : diversity, conflict resolution, sustainable development and human rights through experiential learning, June '15
- A member of the children jury delegation of long and short films in Cairo International Film Festival for Children; our role was to select a winner for each prize in the film festival, '07, '08, '10