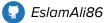
# Eslam Hussein

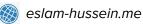


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**Objective** 

Seeking an internship that pertains data analytics, machine learning and software engineering during summer 2020



# Education

Virginia Tech **Cairo University** 

PhD student - Computer Science Masters in Computer Science - 2016 3.82 GPA

Bachelor in Computer Science – 2007 3.68 GPA



Skills

Languages: Scala, Java, Python, C/C++, C#, VB.Net, Prolog, SQL/TSQL

Frameworks/Systems: Spark, Hadoop, Scikit-Learn, NLTK, Microsoft SQL Server, MySQL, Linux, ASP.NET,

LINQ, WCF, XML, Javascript, JQuery, Git, SVN, RDF, Docker, Singularity

Natural Languages: English, Arabic



# Work \_\_\_\_\_

## Advanced Research Computing (ARC)

Aug 2019 – present

Research Assistant, responsible for developing and maintaining and deploying containerized applications on ARC clusters (Docker, Singular)

## Social Computing Lab, Virginia Tech

Aug 2018 - Aug 2019

Research Assistant, responsible for designing, executing the YouTube audit project

#### **Qatar Computing Research Institute, Doha**

Apr 2016 - Jun 2018

Research Associate, had several responsibilities developing/maintaining/testing Arabesque and QFrag

**Cairo University** Sep 2007 - Mar 2016

Assistant Lecturer, Taught several Computer Science courses (Data Structures, Algorithms, NLP, Al, Software Engineering I and II, Artificial Intelligence)

Azhasys, Cairo

Aug 2011 - May 2012

Software Engineer, developed a couple of projects

- PrevWage: an employee payroll management module, Technologies: VB.Net, SQL Server 2008, JQuery
- 2. NOSR: an event management module

Technologies: ASP.NET, SQL Server 2008, JQuery

#### Infinite Software Solutions Inc (ISSI)

Nov 2010 - July 2011

Software Engineer, developed a communication module which sends Emails, Faxes and SMSs to a list of recipients Technologies: ASP.NET, WCF, LINQ, SQL Server 2008, JQuery, Subsonic, NUnit

## Data Mining & Computer Modeling Center of Excellence, Cairo

Apr 2008 - Sep 2010

Software Engineer, responsible for designing and developing a couple of projects

Revenue Management System (Plaza Hotel - Alexandria): A desktop application that uses machine learning to predict the revenue for the Plaza hotel

Technologies: C#, SQL Server 2005, Crystal reports

Web portal (Egyptian Ministry of Tourism): A portal that uses machine learning to forecasts the number of tourists arriving in Egypt based on historical tourists arrival statistics in Egypt

Technologies: ASP.NET, SQL Server 2005, OLAP



**Arabesque** is a distributed graph mining system, I had:

- 1. optimized the memory utilization
- 2. built applications on top of Arabesque
- 3. built and configured hadoop clusters

Technologies: Hadoop, Apache Spark, Scala, Java, Python

**QFrag** is a distributed graph search system

I was responsible for porting QFrag to work on top of Apache Spark instead of Giraph/Hadoop Using: Hadoop, Apache Spark, Scala, Java

**YouTube Audit**: this project aims to audit the search and recommendation systems of YouTube for recommending misinformative videos (fake news, conspiracies, rumors ... etc.) to the end user. I am responsible for:

- 1. Experimental design of the project
- 2. Data collection and processing
- 3. Developing artificial bots that mimics the user interactions with YouTube (searching, watching videos)
- 4. Developing models that classifies YouTube videos utilizing features such as titles, descriptions, video statistics and users comments

Technologies: Python, Selenium, Node.js, Pandas, Matplotlib, and Scikit-learn



# Publications \_\_\_\_\_

- 1. Nature inspired algorithms for solving the community detection problem. **Eslam Hussein**, Ahmed Ibrahem Hafez, Aboul Ella Hassanien, Aly A Fahmy. Logic Journal of the IGPL: Oxford Journals, 2017
- 2. Graph Data Mining with Arabesque. **Eslam Hussein**, Abdurrahman Ghanem, Vinicius Vitor dos Santos Dias, Carlos HC Teixeira, Ghadeer AbuOda, Marco Serafini, Georgos Siganos, Gianmarco De Francisci Morales, Ashraf Aboulnaga and Mohammed Zaki. SIGMOD 2017 (*Honorable Mention*)
- 3. Blog Clustering with Committee Approach. Fatma H. Ismail, **Eslam Hussein**, Aboul Ella Hassanien, Tai-Hoon Kim. Fourth International Conference on Information Science and Industrial Applications (ISI) 2015
- 4. *A Discrete Bat Algorithm for the Community Detection Problem.* **Eslam Hussein**, Ahmed Ibrahem Hafez, Aboul Ella Hassanien, Aly A Fahmy. International Conference on Hybrid Artificial Intelligence Systems (HAIS2015)
- 5. Community Detection Algorithm Based on Artificial Fish Swarm Optimization. **Eslam Hussein**, Ahmed Ibrahem Hafez, Aboul Ella Hassanien, Aly A Fahmy. IEEE Conf. on Intelligent Systems 2014