

Eslam Hussein



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eahussein



EslamAli86



Objective

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



Education

Virginia Tech	PhD student - Computer Science	3.82 GPA
Cairo University	Masters in Computer Science - 2016	
	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, AI, Software Engineering I and II, Artificial Intelligence)

Azhasys, Cairo

Aug 2011 - May 2012

Software Engineer, developed a couple of projects

1. *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

1. *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
2. *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

Projects

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 Ibrahim 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 Abounnaga 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 Ibrahim 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 Ibrahim Hafez, Aboul Ella Hassanien, Aly A Fahmy. IEEE Conf. on Intelligent Systems 2014
6. *Measuring Misinformation in Video Search Platforms: An Audit Study on YouTube.* **Eslam Hussein**, Prerna Juneja, Tanushree Mitra. CSCW 2020 (submitted)