JUDE KHOUJA   +1 202 733 0000   mkhooja@gmail.com

SUMMARY
NLP: Language representation, LM, QA, Multi-task learning, Computational Social Science
ML: Linear Models, SVM, Random Forests, PCA ,Clustering, LDA. **Programing:** Python, Pytorch, SQL
Other: Mentoring ML Scientists and Research Interns, Technical Lead, Recruiting

EDUCATION
Stanford University - Graduate coursework in Natural Language Processing with Deep Learning (CS224n), 2017
University of Maryland College Park - Masters in Information Management, May 2012
Damascus University - B.E. Computer Science, Focus: Artificial Intelligence, July 2007

HONORS   Fulbright Scholarship, U.S. Department of State 2010.

PUBLICATIONS
Khouja, J. Stance Prediction and Claim Verification: An Arabic Perspective. Proceedings of the Third Workshop on Fact Extraction and VERification (FEVER) workshop at ACL 2020

Social Media for Political Change: The Activists, Governments and Firms Triangle of Powers During the Arab Movement. Handbook of Research on Political Activism in the Information Age (pages 26-36). IGI Global 2015

Knowledge and Theme Discovery across Very Large Biological Data Sets Using Distributed Queries: A Prototype Combining Unstructured and Structured Data. PLOS 2013

Mr. LDA: A Flexible Large Scale Topic Modeling Package using Variational Inference in MapReduce. ACM International Conference on World Wide Web, 2012.

HIGHLIGHTED EXPERIENCE
SR. STAFF APPLIED SCIENTIST, FORETHOUGHT.AI
Feb 2021 - Present
Working on improving representation learning for question answering systems. Hiring and mentoring other team members.

SR. PRINCIPAL ML SCIENTIST, SAGE INTACCT
Apr 2020 – Jan 2021
Helped the company release their first AI product by revamping all ML models (Improve relative F1-score 60-80%). Helped build the ML engineering team and hired key positions.

SENIOR APPLIED SCIENTIST, MICROSOFT
May 2018 – Sep 2019
Contributed to scaling up Language Model distributed training to tens of billions of words and explored the use of sub-word representations (PBE, Wordpiece) in speech services.

SENIOR /PRINCIPAL DATA SCIENTIST, SALESFORCE
Sep 2015 – Feb 2018
Drove the team's NLP DL foundation and automated business processes by building text classification models for the customer support processes.

Built models for churn prediction and customer segmentation using various classification, regression and clustering methods.
Developed reusable machine learning pipeline and feature engineering libraries.

DATA SCIENCE LEAD, CRITTERCISM
Jul 2014 – Nov 2014
Applied clustering techniques and text matching for cardinality reduction.

Built internet facing analytics portal for tracking live mobile performance metrics worldwide.
Built AWS on demand analytics infrastructure using S3 and EMR.

DATA ANALYTICS LEAD, IREX
Nov 2013 – Jun 2014
Developed and implemented data driven practices and programs for violations documentation.
Managed and oversaw the building of the technology and the data team from scratch.

BIG DATA SPECIALIST, ORACLE
Mar 2013 – Oct 2013
Developed machine learning proof of concepts in the public sector using technologies including Hadoop, Hive, Pig, R Enterprise, Mahout and other proprietary and open source tools.

DATA SCIENTIST, ORACLE
Jun 2012 – Aug 2012
Was the Lead Data Scientist in the Oracle/NCI partnership project which resulted in winning the "2012 Best Government Big Data Solution" Award.
Developed MapReduce programs in Java and Python for analyzing simulated Gene data of 900 million patients.
Assisted in building a 9-node Hadoop (CDH) cluster.

GRADUATE RESEARCH ASSISTANT, UMIACS
Oct 2011 – May 2012
Evaluated large scalable distributed Topic Modeling algorithm (LDA) and applied them for unsupervised lexicon expansion.
Developed an Arabic version of the Word Count tool for sentiment analysis and honor dictionary validation.

PROGRAM OFFICER – M&E, UNITED NATIONS
Aug 2009 – Aug 2010
Developed and implemented a comprehensive M&E plan for a $6 Million grant by The Global Fund Program (GFATM).
Oversaw the design and implementation of the health management information system.

TECHNOLOGY CONSULTANT, UNITED NATIONS
Aug 2008 - Mar 2009
Conducted comprehensive assessment of the existing IT infrastructure and capacity for the United Nations (UNDP) project on Aid Effectiveness and produced a full analysis report to the Minister of state planning commission.

CERTIFICATION
M&E for UN programs, United Nations, Geneva 2009.
SCJP (Sun Certified Java Programmer), Sun 2008.