Eric (Ehsan) Qasemi

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Education

PhD. in Computer Science   Cont.
Univ. of Southern California 3.48/4.0

MSc. in Computer Science   2018
Univ. of Wisconsin-Madison 3.56/4.0

MSc. in Computer Engr.   2018
Univ. of Wisconsin-Madison 3.56/4.0

BSC. in Electrical Engr.   2015
University of Tehran   16.12/20.0

Skills

LANGUAGES: Python, C/C++, Java, Scala, Matlab, Julia, Cuda

ML&DS: Torch, Tensorflow, Keras, Pandas, MatPlotLib, Bokeh, scikit

HPC: Hadoop (HDFS, Tez), Spark (SQL, Streaming, GraphX), Apache (Hive, Storm, Flink)

DATABASES: SQL, SQL-Lite, Redis, ElasticSearch, RocksDB, MongoDB

Web: React, Flusk, Django, HTML, CSS, JavaScript

Honors

Research Scholarship Recipient from University of Southern California (2018)

1'st place in National Digital System Design Competition, HW/SW Co-design League, Iran (2013)

Voluntary

President at Persian Student's Society of UW Madison (PSS)   2015-2017

Board Member of the first Iranian film festival (WIFF),   March '17

Research Experience

Machine Common Sense Reasoning   Los Angeles, CA   2019-Cont.

CSKG: Consolidate various resources of commonsense knowledge into a first integrated commonsense knowledge graph

ContextQuisite: Reinforcing commonsense knowledge graphs with contextual requisites

Knowledge Graph Embedding for Table Parsing   Los Angeles, CA Summer '19

Representational capacity of graph embedding for ontology mapping in Knowledge Graphs

Tabular Data to Knowledge Graph: Understand table context and map the content to knowledge graphs such as dbpedia and wikidata

End-to-End AutoML   Los Angeles, CA   Jan-May'19

Study on Meta-learning approaches for E2E-AutoML with focus on data-preparation

DSBox: End-to-End Automated Machine Learning system

Beats state-of-the-art E2E-AutoML systems and human baseline on D^3M's datasets

Discovery of Autism Spectrum Disorder (ASD)   Madison, WI   2016-'18

Research and development in big heterogeneous spatiotemporal data

Designed deep LSTM model for ASD prediction

Work Experience and Internships

Research Intern   Information Sciences Institute, Marina Del Ray, CA   Summer'18

Designed a Meta-Learning pipeline recommender system for automated machine learning in high dimensional structured datasets

Software/Hardware Engineer   IWIN Co., Tehran, Iran   2014, '15

SoC Hardware Security Module (HSM) for banking applications

10x improvement on AES, 9x improvement on key manager, and 4x improvement on RSA

Lead the HW team to design cryptography algorithms and secure key managers

Research Intern   Pardis Co, Tehran, Iran   Summer'16

Designed an Embedded low cost server for real-time media encryption

Selected Publication

NLP   Ilievski F, Szekely P, Cheng J, Zhang F, Qasemi E. Consolidating Commonsense Knowledge. arXiv preprint arXiv:2006.06114. 2020 Jun 10.

AutoML   E. Qasemi, S. Stan, K. Yao, R. Shao, J. Liu, M. Liang, L. J. Ferrer, P. Szekely, "DSBox: Data Scientist in a Box", ISI Graduate Student Symposium (GSS '19), Marina Del Rey, California, USA.

ML   Yu F, Thayer M, Qasemi E, Zhu K, Assadi A. Deep Learning Features in Atmospheric Chemistry: Prediction of Cancer Morbidity Due to Air Pollution. In2017 International Conference on Computational Science and Computational Intelligence (CSCI) 2017 Dec 14 (pp. 1764-1766). IEEE.

NLP   Thawani A, Hu M, Hu E, Zafar H, Divvala NT, Singh A, Qasemi E, Szekely PA, Pujara J. Entity Linking to Knowledge Graphs to Infer Column Types and Properties. InSemTab@ ISWC 2019 (pp. 25-32).

AI   E. Qasemi, Mohammad H. Shadmehr, Bardia Azizian, Amir Samadi, Sajjad Mozaffari, Amir Shirian and Bijan Alizadeh, "Highly Scalable, Shared Memory , Monte Carlo Tree Search based Blokus Duo Solver on FPGA ", International Conference on Field-Programmable Technology (FPT), 2014.