Eric (Ehsan) Qasemi

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proska

Education –

PhD. in Computer Science Cont. Univ. of Southern California 3.3/4.0

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

ML&DS: Tensorflow, Torch, 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: 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)

1'st place in 2D Soccer Simulation Competition, Iran (2008)

Ranked as 57 among ≈500,000 students in National Universities Entrance Exam, Iran (2010)

Voluntary

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

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

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

Software Engineer

S.T.Farabi Co., Sanandaj, Iran 2013, '14

Genetic algorithm (GA) based real-time robotic arm controller on FPGA platform.

Research and Projects

Neural Common Sense

Los Angeles, CA Fall '19

Study on neural common sense reasoning based on a mixture of Language models and common sense knowledge graphs.

Knowledge Graph Embedding for Table Parsing Los Angeles, CA Summer '19 Study on representational capacity of graph embedding for ontology mapping in Knowledge Graphs

T2WML: an annotation scheme to simplify knowledge extraction from tabular data

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 datapreparation

DSBox: End-to-End Automated Machine Learning system

Beats state-of-the-art E2E-AutoML systems and human baseline on $\mathsf{D}^3\mathsf{M}$'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

Selected Publication

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,

1157

ML
Z. Liz Li, E. Qasemi, A. Ardalan, H. Gao, A. H. Assadi, "A Computational Model for Mental Face Spaces: Deep Learning Empirical Space of Faces", The 2017 International Conference on Computational Science and Computational Intelligence (CSCI 17), Dec 2017, Las Vegas,

USA.

ΑI

DS A. H. Assadi, P. Han, E. Qasemi, A. Ardalan, H. Gao, "Deep Learning Empirical Topology for Classical Music Style Decision Making", The 2017 International Conference on Computa-

tional Science and Computational Intelligence (CSCI 17), Dec 2017, Las Vegas, USA. 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.