

Hossein Hamooni

MACHINE LEARNING EXPERT

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Experience

Facebook, Infrastructure Data Science

DATA SCIENTIST

Menlo Park, CA, USA

August 2019 - Present

Visa Research

STAFF RESEARCH SCIENTIST

Palo Alto, CA, USA

November 2018 - July 2019

- Leading a project on detecting anomalies on user behaviour

RESEARCH SCIENTIST

June 2017 - November 2018

- Working as a researcher in Data Analytics Team
- Designed and implemented a restaurant recommendation systems using deep learning

University of New Mexico

RESEARCH ASSISTANT

Albuquerque, NM, USA

August 2013 - May 2017

- Working on several data mining projects
- All projects involve distributed computing, time series mining, and big data
- In collaboration with Dr. Abdullah Mueen

Visa Research

RESEARCH INTERN

Foster City, CA, USA

May 2016 - August 2016

- Designed a recommender system based on machine learning techniques
- We used TensorFlow to train a neural network on a huge dataset
- Designed a method to evaluate the performance of the embeddings
- In collaboration with Dr. Hao Yang

NEC Laboratories America Inc.

RESEARCH INTERN

Princeton, NJ, USA

May 2015 - August 2015

- Designed an algorithm for heterogeneous log analysis and implemented it in Spark (a map-reduce framework)
- The designed algorithm can process hundreds of millions of computer logs in less than an hour
- The designed system generates accurate log patterns from the input logs
- In collaboration with Dr. Biplob Debnath, Dr. Hui Zhang and Dr. Xianwu Xu

Farazpardazan Co.

Co-FOUNDER

Tehran, Iran

November 2010 - July 2013

- Leader of a software development team
- Developed a core banking system based on message passing protocol in Java.

Education

University of New Mexico

PH.D. IN COMPUTER SCIENCE (WITH DISTINCTION)

Albuquerque, NM, USA

August 2013 - May 2017

- Advisor: Dr. Abdullah Mueen
- Research interests: Distributed computing, Time series mining and Mining social media
- Dissertation Title: Distributed knowledge discovery for diverse data
- GPA: 4.07 / 4

Tehran Polytechnic (Amirkabir University of Technology)

M.S. IN COMPUTER NETWORKS

- Thesis Title: Designing a black-hole detection system for wireless networks
- GPA: 17.50 / 20

Tehran, Iran

August 2010 - February 2013

Tehran Polytechnic (Amirkabir University of Technology)

B.S. IN COMPUTER ENGINEERING

- Ranked second best student in computer engineering
- GPA: 17.42 / 20

Tehran, Iran

August 2006 - May 2010

Publication

DisPatch: Distributed Pattern Matching over Streaming Time Series

BIG DATA 2018

- Hossein Hamooni, Abdullah Mueen

Seattle, WA, USA

December 2018

Mining Sparse Time Series under Dynamic Time Warping

KNOWLEDGE AND INFORMATION SYSTEMS JOURNAL

- Abdullah Mueen, Nikan Chavoshi, Noor Abuelrub, Hossein Hamooni, Amanda Minnich, Jonathan MacCarthy

March 2017

On-Demand Bot Detection and Archival System

WWW 2017

- Nikan Chavoshi, Hossein Hamooni, Abdullah Mueen

Perth, Australia

April 2017

Temporal Patterns in Bot Activities

WWW 2017, TEMPWEB WORKSHOP

- Nikan Chavoshi, Hossein Hamooni, Abdullah Mueen

Perth, Australia

April 2017

DeBot: Twitter Bot Detection via Warped Correlation

ICDM 2016

- Nikan Chavoshi, Hossein Hamooni, Abdullah Mueen

Barcelona, Spain

December 2016

Fast Warping Distance for Sparse Time Series

ICDM 2016

- Abdullah Mueen, Nikan Chavoshi, Noor Abuelrub, Hossein Hamooni, Amanda Minnich

Barcelona, Spain

December 2016

On URL Changes and Handovers in Social Media

SOCINFO 2016

- Hossein Hamooni, Nikan Chavoshi, Abdullah Mueen

Seattle, WA, USA

November 2016

Identifying Correlated Bots in Twitter

SOCINFO 2016

- Nikan Chavoshi, Hossein Hamooni, Abdullah Mueen

Seattle, WA, USA

November 2016

LogMine: Fast Pattern Recognition for Log Analytics

CIKM 2016

- Hossein Hamooni, Biplob Debnath, Jianwu Xu, Hui Zhang, Geoff Jiang, Abdullah Mueen

Indianapolis, IN, USA

October 2016

Phoneme Sequence Recognition via DTW-based Classification

KNOWLEDGE AND INFORMATION SYSTEMS JOURNAL

- Hossein Hamooni, Abdullah Mueen, Amy Neel

October 2015

Dual-domain Hierarchical Classification of Phonetic Time Series

ICDM 2014

- Hossein Hamooni, Abdullah Mueen

Shenzhen, China

December 2014

Time Series Join on Subsequence Correlation

ICDM 2014

- Abdullah Mueen, Hossein Hamooni, Trilce Estrada

Shenzhen, China

December 2014

Patent

DisPatch: Distributed Pattern Matching over Streaming Time Series

HOSSEIN HAMOONI, ABDULLAH MUEEN

Fast Pattern Discovery for Log Analytics

HOSSEIN HAMOONI, BIPLOB DEBNATH, JIANWU XU, HUI ZHANG, GUOFEI JIANG

Honors & Awards

2017	Ph.D. with distinction	Albuquerque, NM
2017	Nominated for UNM School of Engineering outstanding graduate student	Albuquerque, NM
2017	Best author showcase award at NMSC 2017	Albuquerque, NM
2016	CIKM 2016 student travel award	Indianapolis, IN
2015	Best poster presentation at UNM's Data 2 Knowledge Day	Albuquerque, NM
2015	Best mentor award at UNM's Lobo Friend Program	Albuquerque, NM
2014	ICDM 2014 student travel award	Shenzhen, China
2014	Second place in the poster competition in CS/ECE Tech Day 2014	Albuquerque, NM
2010	International Collegiate Programming Contest (ICPC) World finals, as a coach assistant	Harbin, China
2010	10th Place in ACM/ICPC West Asian Regional Contest, as a coach	Tehran, Iran
2006	Ranked 540 in National Universities Entrance Exam among more than 700,000 applicants	Tehran, Iran

Professional and Service Activities

2017	Reviewer for KDD'17 (Knowledge Discovery and Data Mining Conference)	U.S.
2017	Reviewer for SDM'16 (SIAM International Conference on Data Mining)	U.S.
2016	Reviewer for ICDM'16 (International Conference on Data Mining)	U.S.
2016	Reviewer for KNOSYS (Journal of Knowledge-Based Systems)	U.S.
2016	President of Iranian Students Association at UNM	U.S.
2015	Mentor for new international students at UNM (Lobo Friend Program)	U.S.
2009	Chair of the student committee in 14th international conference of computer association of Iran	Tehran, Iran
2008	Head of the student scientific association in computer engineering department	Tehran, Iran

Skills

Programming	Java, Python, C/C++, Matlab, Spark (Map-reduce framework)
Script	Javascript, HTML, Latex
Languages	English, Persian, Arabic