CV Muhammad (Tony) Yousefnezhad

"I want to learn everything profoundly and then make them better."

College of Computer Science and Technology
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PERSONAL

Nationality: Iranian
Place of birth: Qaemshahr, Iran
Marital status: Married
Height: 1.80m
Data of birth: Feb/11/1987
Health: Excellent

EDUCATION

Ph.D. Computer Science — Artificial Intelligence, Sep/2014—Jun/2018
Nanjing University of Aeronautics and Astronautics, China
GPA: 87 of 100 Thesis: 90.8 of 100

M.Sc. Information Technology — Artificial Intelligence, Feb/2011—Sep/2013
Mazandaran University of Science and Technology, Iran
GPA: 19.37 of 20 (2nd top student) Thesis: 19.5 of 20

B.Sc. Computer Science — Hardware Engineering, Sep/2008—Aug/2010
Mazandaran University of Science and Technology, Iran
GPA: 18.52 of 20 (top student) Thesis: 20 of 20

H.N.D. Computer Science — Hardware Engineering, Sep/2004—Oct/2006
Azad University, Eqlid Branch, Iran
GPA: 17.52 of 20 (top student) Thesis: 20 of 20

RESEARCH INTERESTS

- Deep Learning, Machine Learning, Statistical Pattern Recognition, and Data Mining.
- Big data, Biological data analysis, Human Brain's data analysis, i.e., fMRI, fNIRS, EEG, MEG, PET.

JOB EXPERIENCES

- **Jul/2018 – Present**, Postdoc fellow under the supervision of Prof. Daoqiang Zhang at Nanjing University of Aeronautics and Astronautics (full-time job).
- **Sep/2014 – Jun/2018**, A Research Assistant under the supervision of Prof. Daoqiang Zhang at Nanjing University of Aeronautics and Astronautics (part of my Ph.D. degree)
- **Feb/2009 – Aug/2014**, A data and network analyst at Rasa Ertebatat Soffe Co. (part-time job)
- **Nov/2006 – Aug/2008**, The network Administrator at Reza Noor Ltd. (part-time job)

TEACHING EXPERIENCES

- **Feb/2015 - Sep/2015**, Teacher Assistant, Nanjing University of Aeronautics and Astronautics, Data Mining under the supervision of Prof. Daoqiang Zhang.
- **Feb/2010 – Jul/2014**, Lecturer, Mazandaran University of Science and Technology, Courses: Data Mining, Expert System, Machine Learning, Computer Networks & Lab., Network Operating System & Lab., Microprocessor & Lab., FPGA & Lab., VHDL & Verilog.
- **Feb/2009 – Jul/2011**, Teacher Assistant, Mazandaran University of Science and Technology, Assembly programming under the supervision of Dr. Saber Nourian.
- **Sep/2005 – Jul/2006**, Teacher Assistant, Azad University Eqlid branch, Microprocessor, FPGA, VHDL, and Verilog. under the supervision of Dr. Ali Bohlooli.
- **Sep/2004 – Jul/2005**, Teacher Assistant, Azad University Eqlid branch, Digital Electronic and Computer Architecture under the supervision of Dr. Nader Karimi.

HONORS

- **2016,** The best student paper award in the BICS 2016 for our paper entitled “Decoding visual stimuli in human brain by using Anatomical Pattern Analysis on fMRI images.”
- **2014,** Invited to a Ph.D. course as a Brilliant Student with a full scholarship of China Scholarship Council (CSC) in the “Nanjing University of Aeronautics and Astronautics,” China.
- **2013,** Graduated as the top student over 25 peers in the course (M.Sc.), “Mazandaran University of Science and Technology,” Iran.
- **2010,** Invited to M.Sc. interview as a Brilliant Student without the entrance exam in “Mazandaran University of Science and Technology,” Iran.
- **2010,** Graduated as the top student over 30 peers in the course (B.Sc.), “Mazandaran University of Science and Technology,” Iran.
- **2006,** Invited to B.Sc. interview as a Brilliant Student without the entrance exam in “Azad University Eqlid branch,” Iran.
- **2006,** Graduated as the top student over 40 peers in the course (HND), “Azad University Eqlid branch,” Iran.
- **2001,** the 3rd in Mazandaran Kharazmi Festival for designing computer software to manage and control the cost and time of the Industrial Projects.
- **1999,** the 2nd programmer in National Computer Programming Competition, Mazandaran, Iran.

SKILLS

Artificial Intelligence: R, Weka, Gephi, Cytoscape, SPSS Modeler.

Machine Learning: Scikit-learn, Tensorflow, Theano, Torch, PyCUDA, Scikit-CUDA.

Programming Languages: Python, Matlab, C, C++, C#, Java, PHP, AJAX, jQuery.

Neuroscience: AFNI, FSL, SPM, FreeSurfer, Group ICA, NIfTI.

Programming Studio: J-Developer, Visual Studio, Eclipse.

Database: Oracle Database, Microsoft SQL, Postgre-SQL, My-SQL, MS Access.

OS: OSX, Linux (Ubuntu, SUSE, Red Hat, Cent-OS, and Debian), Windows, Solaris.

Network: Cisco IOS, Cisco Unified Communication, Microsoft ISA, and Exchange.

Designing Hardware: ModelSim, Altium Designer, Xilinx ISE, IAR ARM, L-EDIT.

Hardware: Cisco routers and switches, Siemens IP-PBX, Avaya IP-PBX, HP servers.

PROJECTS

- Founder of Easy fMRI, available at https://easyfmri.gitlab.io
- Founder of Easy Data, available at https://easydata.gitlab.io
- Designing Expert System for forecasting production rate in Reza Noor Ltd.
- Designing cheat detection for finance system in Reza Noor Ltd.
- Designing and implementing Smart Identifier (a general smart key).
- Designing and implementing Data Center for Sari municipality.
- Designing and implementing a network in Reza Noor Ltd. for 700 users.
- Designing FPGA, USB, and PCI learning kit (for MUST University).
- Designing Emergency lights, LED halogen lights, and fluorescent blast for Reza Noor Ltd.
- Designing ICT-Master plan for Mazandaran University of Science & Technology.
- Analysis and implementation of software for network management at Reza Noor Ltd.

JOURNAL REFEREE

- IEEE Transactions on Cybernetics
- IEEE Sensors Journal
- Multimedia Systems
- Applied Soft Computing

PUBLICATIONS

- **Conference Papers**
  - 2018. X. Sheng, **M. Yousefnezhad,** T. Xu, N. Yuan, D. Zhang, Gradient-based Representational Similarity Analysis with Searchlight for Analyzing fMRI Data. *1st Chinese Conference on Pattern Recognition and Computer Vision 2018 (PRCV18)*, Nov/23-26, Guangzhou, China.
  - 2018. T. Xu, **M. Yousefnezhad**, D. Zhang, Gradient Hyperalignment for multi-subject fMRI data alignment. *15th Pacific Rim International Conference on Artificial Intelligence*, China, Aug/28-31.
  - 2017. **M. Yousefnezhad**, D. Zhang, Deep Hyperalignment, *31st Advances in Neural Information Processing Systems (NIPS)*, Long Beach, USA, December/4-9, ***Spotlight Presentation***.
  - 2017. **M. Yousefnezhad**, D. Zhang, Multi-Region Neural Representation: A novel model for decoding visual stimuli in human brains. *SIAM International Conference on Data Mining (SDM)*, Houston, Texas, USA, April/27-29, pp. 54-62.
  - 2017. **M. Yousefnezhad**, D. Zhang, Local Discriminant Hyperalignment for multi-subject fMRI data alignment. *34th AAAI Conference on Artificial Intelligence (AAAI)*, San Francisco, California, USA, February/4-9, pp. 59-65.
  - 2016. **M. Yousefnezhad**, D. Zhang, Decoding visual stimuli in human brain by using Anatomical Pattern Analysis on fMRI images. *8th International Conference on Brain Inspired Cognitive Systems (BICS)*, Beijing, China, November/28-30, ***Best Student Award***.
  - 2016. M. Bagheri, **M. Yousefnezhad**, A. Reihanian, Non-functional requirement management in service orientation by using aspect orientation. *3rd International Conference on applied research in Computer and Information Technology*, Tehran, Iran, February/04 (in Persian)
  - 2015. **M. Yousefnezhad**, D. Zhang, Weighted Spectral Cluster Ensemble, *IEEE International Conference on Data Mining series (ICDM'15).* Atlantic City, New Jersey, USA.
  - 2015. A. Reihanian, B. Minaei-Bidgoli, **M. Yousefnezhad**, Evaluating the effect of topic consideration in identifying communities of rating-based social networks. *7th International Conference on Information and Knowledge Technology (IKT'15)*, Urmia, Iran.
  - 2015. S. Aghaei Nezhad Firouzja, **M. Yousefnezhad**, M. Fauzi Othman, M. Samadi, A wised routing protocols for Leo Satellite Networks, *10th Asian Control Conference*, Universiti Teknologi Malaysia, Malaysia.
  - 2015. M. Tourandaz, **M. Yousefnezhad**, S. Nourian, To propose a new method for diagnosing Alzheimer's disease based on the selected features via sparse coding, *7th Iranian & 1st International Conference of Knowledge Management*, Shahid Beheshti University, Tehran, Iran (in Persian).
  - 2015. M. Tourandaz, **M. Yousefnezhad**, S. Nourian, Diagnosis of Alzheimer's Disease by applying Support Vector Machine on the Locally Linear Embedding mapped data, *1st ICCONF.* Tehran, Iran (In Persian).
  - 2015. M. Tourandaz, **M. Yousefnezhad**, S. Nourian, Diagnose mild cognitive impairment's disease based on the selected features via sparse coding. *National Conference on Intelligent Systems and Communications Technology (TSPI '12)*, Tabriz, Iran (in Persian).
  - 2015. M. Tourandaz, **M. Yousefnezhad**, S. Nourian, To propose a new method for predicting Alzheimer disease in MCI subjects based on the selected features via sparse coding, *National Conference on Information & Communication Technology (ICT'15)*, Shahid Beheshti University, Tehran, Iran (in Persian).
  - 2015. M. Kazemi, **M. Yousefnezhad**, S. Nourian, Persian Handwritten Letter Recognition Using Ensemble SVM Classifiers Based on Feature Extraction. *National Conference on Intelligent Systems and Information and Communications Technology*, Tabriz, Iran (in Persian).
  - 2014. M. Kazemi, **M. Yousefnezhad**, S. Nourian, Persian Handwritten Letters Recognition with Using Ensemble Methods, *2nd Conference on Computer and Information Technology (CSCCIT'14)*, Tabriz, Iran (in Persian).

- 2013. **M. Yousefnezhad**, H. Alizadeh, B. Minaei-Bidgoli, New cluster ensemble selection method based on Diversity and Independent metrics. *5th Conference on Information and Knowledge Technology (IKT'13)*, Shiraz, Iran (in Persian).

- **Journal Papers**
  - 2018. **M. Yousefnezhad**, D. Zhang, Multi-Objective Cognitive Model: a supervised approach for multi-subject fMRI analysis. *Neuroinformatics*, Springer.
  - 2017. **M. Yousefnezhad**, D. Zhang, Anatomical Pattern Analysis for decoding visual stimuli in human brains. *Cognitive Computation*. Springer, pp. 1–12.
  - 2017. **M. Yousefnezhad**, S. J. Huang, D. Zhang, WoCE: a framework for clustering ensemble by exploiting the wisdom of Crowds theory. *IEEE Transactions on Cybernetics*, Issue 99, pp. 1-14.
  - 2017. F. Asghari-Paeenroodposhti, S. Nourian, **M. Yousefnezhad**, Wised Semi-Supervised Cluster Ensemble Selection: A New Framework for Selecting and Combing Multiple Partitions Based On Prior knowledge. *Journal of Advances in Computer Research*, vol. 8(1).
  - 2016. **M. Yousefnezhad**, A. Reihanian, D. Zhang, B. Minaei-Bidgoli, A new selection strategy for selective cluster ensemble based on Diversity and Independency. *Engineering Applications of Artificial Intelligence (EAAI)*, Elsevier, vol. 56, pp. 260-272.
  - 2015. H. Alizadeh, **M. Yousefnezhad**, B. Minaei-Bidgoli, Wisdom of Crowds Cluster Ensemble, *Intelligent Data Analysis*, IOS Press, vol. 19(3).
  - 2015. M. Kazemi, **M. Yousefnezhad**, S. Nourian, A New Approach in Persian Handwritten Letters Recognition Using Error Correcting Output Coding, *Journal of Advances in Computer Research*, vol. 6(4).

- **Abstract (Talks)**
  - 2018, Analyzing Human Brain Patterns by using deep approaches, Keynote, 1st Machine Learning, Optimization and Control (MLOC'18), Shenzhen, China.
  - 2017. Deep Hyperalignment. Special invited, 15th Workshop in Machine Learning and Application (MLA'17), Beijing Jiaotong University, China.
  - 2015. Adaptive Weighted Spectral Clustering. Keynotes, 3rd International Conference of Postgraduates, Nanjing University of Aeronautics and Astronautics, China.
  - 2014. The wisdom of Crowds cluster ensemble selection. Keynotes, 2nd International Conference of Postgraduates, Nanjing University of Aeronautics and Astronautics, China.
  - 2011. Network Security, Keynotes, 1st Annual Conference on Stable Networks, Mazandaran University of Science and Technology, Iran (in Persian).