Saeed VARASTEH YAZDI

CONTACT INFORMATION

Address: IMAG, Université Grenoble Alpes, France
Mobile: +33 7 62 75 10 58
Email: saeed.varasteh-yazdi@univ-grenoble-alpes.fr
WWW: http://ama.liglab.fr/~varasteh/

EDUCATIONS

January 2019 – Present
Postdoctoral Researcher Laboratoire d'Informatique de Grenoble (LIG)
I am currently working on deep learning models for time series forecasting, classification and causal reasoning. The research is supported by the French National Research Agency through the ANR-LOCUST and ANR-APi projects, under the supervision of Ahlame Douzal (Associate Prof. Univ Grenoble Alpes) [Ahlame.Douzal@univ-grenoble-alpes.fr]

January 2016 – December 2018
Ph.D. in Machine Learning Université Grenoble Alpes
My PhD thesis is supervised by Prof. Ahlame Douzal and it is mainly about classification and clustering of temporal data.

Thesis title: *"Time warp invariant sparse coding and dictionary learning for time series classification and clustering"*
The Defense jury members on 15 November 2018:
Prof. Philippe PREUX, Lille University, Reporter
Prof. Mohamed NADIF, Paris Descartes University, Reporter
Prof. Stephane CANU, Normandie University, Examiner
Prof. Patrick GALLINARI, Sorbonne University, Examiner
Mr. Julien MAIRAL, (Charge de Recherch) Inria Grenoble, Examiner
Associate Professor (HDR) Ahlame DOUZAL, Grenoble Alpes University,Thesis director.

January 2009 – February 2012
M.Sc. in Artificial Intelligence Amirkabir (Polytechnic) University of Technology, Tehran, Iran
I completed a M.Sc. at the Department of Informatics, Amirkabir (Polytechnic) University, Tehran. In my thesis I focused on NLP tasks especially, text summarizing. My supervisor was Prof. Mohammad Mehdi Homayounpour.

Thesis title: *"Extractive Persian Multi-Document Summarization"*.
Main Courses: Computer vision, Machine learning, Image processing, Natural language processing, Signal processing and Speech processing

September 2004 – September 2008
B.Sc. in Computer Software Sadjad University, Mashhad, Iran
I completed a B.Sc. in computer software with courses in computer networks and programming. My thesis was a network compatible smart AI board game.

TEACHING EXPERIENCES

January 2017 – present
Undergraduate teaching IUT1, IUT2, Grenoble, France.
Teaching object oriented programming (ASP.Net, C-sharp) course.
Type: CM, TD and TP.
Total Hours:$\geq$ 200 Hours.

January 2019 – present
Teaching assistant Universite Grenoble Alpes, Grenoble, France.
Teaching assistant for Prof. Douzal in machine learning and data science courses (graduate students).
Type: TD and TP.

September 2012 – September 2015
Undergraduate teaching Sadjad University, IAUM University, Mashhad, Iran.
Teaching object oriented programming (c++), c-sharp programming, machine learning, internet engineering, web development, RDBS and artificial intelligence courses.
Type: CM.
Total Hours:$\sim$ 3 full years.

September 2005 – September 2008
Teaching assistant and examiner Sadjad University, Mashhad, Iran.
Teaching assistant and examiner in c++, database management and data structure courses.
Type: TD and TP.

Thesis Supervisions

2018 – 2020
Co-supervising PhD Thesis Universite Grenoble Alpes
I am co-supervisiong PhD thesis of *Thi Phuong Thao Tran*, titled "time series kernel analytics by pre-image estimation" with Prof. Ahlame Douzal and Prof. Paul Honeine.

2019
Co-supervising Master Thesis Universite Grenoble Alpes
I co-supervised matser thesis of *Vera Sosnovik*, titled "Representation Learning for Time Series Motif Extraction" with Prof. Ahlame Douzal.

Workshop and talks

March 2012
Nvivo: Qualitative analysis on the data Ferdowsi University, Mashhad, Iran.
One-day workshop on how to use Nvivo to extract and analysis our data at Faculty of Letters and Humanities, Ferdowsi University, Mashhad.

September 2012 – January 2013
Lecturer Webitschool, Mashhad, Iran.
I created and held a ten day course in web programming with ASP.Net at Webitschool, Mashhad. Several groups of students were participated in my classes during four months.

Work Experiences

January 2019 – present
Research Scientist Universite Grenoble Alpes, LIG, France
Specialist in machine learning and deep learning.

September 2007 – July 2015
Freelance Developer PooyanHost Corporation, Mashhad, Iran
Creating advanced web portals and application such as CMS, CRM, etc.

Internships

Summer 2016
ASDM Summer School Univ. Politécnica de Madrid, Madrid, Spain
One week summer school in the Advance Statistics and Data Mining.

Summer 2012
Bachelor Internship Sadjad University, Mashhad, Iran
Application development and network maintenance.

Honors

Rank 1 Student during Bachelor studies among 57 students in Sadjad University.

Rank 1 Student during Master 1 and 2 studies among 23 students in Amirkabir University of Technology.

Standing between top professors during three years of teaching in Sadjad University.

Accepted by VIBOT(Vision and Robotics) Erasmus Mundus joint master program.

Accepted by Advanced Statistics and Data Mining Summer School in Madrid.

Full funded PhD Candidate by Joseph Fourier (Grenoble Alpes) University.

Skills

Academic programming	Python, Deep Learning Tools (PyTorch, TensorFlow), MATLAB, Latex, R, Nvivo
Programming languages	C++, C-sharp, Pascal, Delphi, SQL
Web application development	HTML5, CSS3, JavaScript, ASP.Net, Web Api, MVC, LINQ and Entity Framework, Angular JS
Certificates	SQL Server Database Developer, Oracle Database Administrator

Ongoing research

2021-2022	Causal reasoning, uplift modeling and deep learning.

2020-2021 Prostate Cancer Treatment (Foch Hospital, Paris).

PUBLICATIONS Conference papers and journals;

2020 Thi Phuong Thao Tran, Ahlame Douzal-Chouakria, **Saeed Varasteh Yazdi**, Paul Honeine and Patrick Gallinari. Interpretable time series kernel analytics by pre-image estimation. *Journal of Artificial Intelligence, Volume 286 (2020).* https://doi.org/10.1016/j.artint.2020.103342

2018 **Saeed Varasteh Yazdi**, Ahlame Douzal-Chouakria, Patrick Gallinari and Manuel Moussallam. Time warp invariant dictionary learning for time series clustering: application to music data stream analysis. *Joint European Conference on Machine Learning and Knowledge Discovery in Databases (ECML/PKDD 2018)..* https://doi.org/10.1007/978-3-030-10925-7_22

2018 **Saeed Varasteh Yazdi** and Ahlame Douzal-Chouakria. Time warp invariant ksvd: Sparse coding and dictionary learning for time series under time warp. *Pattern Recognition Letters 112, 1–8 (2018).* https://doi.org/10.1016/j.patrec.2018.05.017

2018 Jidong Yuan, Ahlame Douzal-Chouakria, **Saeed Varasteh Yazdi** and Zhihai Wang. A large margin time series nearest neighbour classification under locally weighted time warps. *Knowledge and Information Systems, (2018).* https://doi.org/10.1007/s10115-018-1184-z

2017 Cao-Tri Do, Ahlame Douzal-Chouakria, Sylvain Marié, Michèle Rombaut and **Saeed Varasteh Yazdi**. Multi-modal and multi-scale temporal metric learning for a robust time series nearest neighbors classification. *Information Sciences 418, 272-285 (2017).* https://doi.org/10.1016/j.ins.2017.08.020

2011 Poormasoomi, A., Kahani, M., **Varasteh Yazdi, S.** V., and Kamyar, H. Context-based persian multi-document summarization (global view). *In IEEE International Conference on Asian Language Processing (IALP) pp. 145-149*, (2011).

OTHER RESEARCHES

2008 **Extractive Persian Multi Document Summarization**

Multi document summarization is an automatic extraction of information from multiple documents written about the same topic. This research proposes a new method using LSA for extracting the global context of a topic and removes sentence redundancy using SRL and Word Net semantic similarity for Persian language.

Keywords: Multi-document summarization, LSA, SVD, Semantic Similarity, Semantic Role labeling

2011 **Evolutionary Algorithms for Multi Objective Optimization**

This project was focused on evolutionary algorithm for function minimization. We used a benchmark consists of 6 different functions, functions with lots of local minimum points.

Keywords: Genetic Algorithm, Function Optimization

2010 **Function Approximation Using Fuzzy Neural Networks**

The main goal of this research was to implement and test different structures of fuzzy neural networks for function approximations and compare them with MLP and ANFIS neural network.

Keywords: Neural Network, SOM, Fuzzy Neural Network. MLP, Clustering

2010 **A Survey on Component-based Face Detection**

Facial features are useful for systems that require face detection, including personal identification, surveillance, human-machine interface. In the following research we give a brief overview of face detection techniques in gray-scale images.

Keywords: Face recognition, Component-based approach, SVM

LANGUAGE PROFICIENCY Farsi (Persian): Mother tongue, English: C1, French: B2.

RESEARCH INTERESTS Broadly Artificial intelligence, Machine learning and Deep Learning