Mona Jalal

monajalal.com jalal@bu.edu

Research Interests

Computer Vision, Machine Learning, Deep Learning, Vision and Language, Data Science.

Education

Computer Science M.Sc. in Computer Vision, August 25, 2022.
Boston University (BU), Boston, MA, USA.
Projects: "3D Human's Shape, Mesh, and Modeling with Applications" & "Efficient Deep Learning for Digital Pathology Images"
GPI: 3.85/4

Double Major M.Sc. in Computer Sciences and Electrical Engineering
University of Wisconsin-Madison (UW), Madison, WI, USA.
CS GPA: 3.62, CGPA of both degrees: 3.49 out of 4
CS Master's Graduation: May 15th 2016, EE Master's Graduation: August 24th 2014

M.Sc. in Computer Engineering Majored in Computer Architecture
Sharif University of Technology (SUT)–Ranked 1st in Iran
CGPA: 17.71 out of 20

B.Sc. in Computer Engineering Majored in Computer Hardware
Shahid Beheshti University (SBU)–Ranked 5th in Iran.
CGPA: 15.32 out of 20
Second best hardware engineering student in batch of 2009 graduates

National Organization for Development of Exceptional Talents (NODET)
Karaj, Tehran, Iran
Designated for top 5% of the entire high school students in Iran

Experiences

Computer Vision Research Intern *3D pose estimation for activity understanding and 3D human-object interaction reconstruction from single image*
DawnLight Technologies Inc., Palo Alto, CA (remote)
Mentor: Dr. Hadi Kiapour
December 21, 2020-July 2, 2021

Machine Learning Engineering Intern *Hateful conduct detection in tweets*
Twitter Cortex, Cambridge, MA
Mentors: Dr. Kristen Sunter and Dr. Eting Yuan, Manager: Dr. Rani Nelken
June 3-August 30, 2019

Research Intern *3D object pose dataset creation using Unreal Engine 4*
NVIDIA Research, Durham, North Carolina
Mentor: Dr. Josef Spjut, collaborator: Ben Boudaoud, Manager: Dr. David Luebke
June 20-August 31, 2018

R&D Engineer 1 *3D egocentric hand pose estimation*
Center for Augmented Cognition, University of California, Berkeley
Under supervision of Dr. Allen Y. Yang and mentorship of Joseph Menke
May 1-August 15, 2017

Research Intern *Graph signal recovery and playing video games for dataset creation*
Computer Vision Group, Medical Sciences Center, University of Wisconsin-Madison
Under supervision of Professor Vikas Singh and mentorship of Professor Won Hwa Kim
August 1, 2016-May 1, 2017

Graduate Research Assistant *Integrated smart home automation using OpenHAB platform*
Internet of Things Lab, University of Wisconsin-Madison
Under supervision of Dr. Thomas Yen, Professor Raj Veeramani and Alfonso Gutierrez
May 15, 2015-May 15, 2016

Publications & Reports

N. Ruiz, H. Yu, D. A. Allessio, **M. Jalal**, A. Joshi, T. Murray, J. J. Magee, J. R. Whitehill, V. Ablavsky, I. Arroyo, B. P. Woolf, S. Sclaroff, and M. Betke, Leveraging Affect Transfer Learning for Behavior Prediction in an Intelligent Tutoring System, IEEE International Conference on Automatic Face and Gesture Recognition, 2021.

V. Bhatia, V. P. Akavoor, S. Paik, L. Guo, **M. Jalal**, A. Smith, D. A. Tofu, E. E. Halim, Y. Sun, M. Betke, P. Ishwar, D. T. Wijaya, OpenFraming: Open-sourced Tool for Computational Framing Analysis of Multilingual Data, Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP): System Demonstrations, 2021.

I. Tourni, L. Guo, T. H. Daryanto, F. Zhafransyah, E. E. Halim, **M. Jalal**, B. Chen, S. Lai, H. Hu, M. Betke, P. Ishwar, D. T. Wijaya, Detecting Frames in News Headlines and Lead Images in US Gun Violence Coverage, Detecting Frames in News Headlines and Lead Images in US Gun Violence Coverage, Findings of the Association for Computational Linguistics: Conference on Empirical Methods in Natural Language Processing (EMNLP), 2021.

N. Ruiz, **M. Jalal**, V. Ablavsky, D. Allessio, J. Magee, J. Whitehill, I. Arroyo, B. Woolf, S. Sclaroff, M. Betke, Leveraging Affect Transfer Learning for Behavior Prediction in an Intelligent Tutoring System, Technical record

$A.Smith^*, D.A.Tofu^*$, **M. Jalal***, E. E. Halim, Y. Sun, V. Akavoor, M. Betke, P. Ishwar, L. Guo, and D. T. Wijaya, OpenFraming: We brought the ML; you bring the data. Interact with your data and discover its frames. arXiv link.

E. Saraee, **M. Jalal**, M. Betke, Visual Complexity Analysis using Deep Intermediate-Layer Features, Accepted at the Computer Vision and Image Understanding Journal 2020.

M. Jalal*, $K.Wang^*$, J. Sankara, Y. Zheng, E. O. Nsoesie, M. Betke, Scraping Social Media Photos Posted in Kenya and Elsewhere to Detect and Analyze Food Types, ACM Multimedia, 5th International Workshop on Multimedia Assisted Dietary Management (MADiMa), 2019.

L. Guo, K. Mays, S. Lai, **M. Jalal**, P. Ishwar, M. Betke, Accurate, Fast, But Not Always Cheap: Evaluating "Crowdcoding" as an Alternative Approach to Analyze Social Media Data, accepted to "Journalism & Mass Communication Quarterly" (JMCQ) 2019–Top Journal in Communications and Media Studies.

M. Jalal, J. Spjut, B. Boudaoud, M. Betke, SIDOD: A Synthetic Image Dataset for 3D Object Pose Recognition with Distractors, 6th WiCV Workshop at Computer Vision and Pattern Recognition, Long Beach, CA, USA, 2019, 3 pages.

SAVOIAS: A Diverse, Multi-Category Visual Complexity Dataset, ArXiv preprint 2018.

M. Jalal, K. K. Mays, L. Guo, M. Betke, Performance Comparison of Crowdworkers and NLP Tools on Named-Entity Recognition and Sentiment Analysis of Political Tweets, 2nd Widening Natural Language Processing (WiNLP) workshop at North American Chapter of the Association for Computational Linguistics (NAACL) 2018 conference, 4 pages, New Orleans, LA, 2018.

W. Kim, **M. Jalal**, S. J. Hwang, S. C. Johnson, V. Singh, Online Graph Completion: Multivariate Signal Recovery in Computer Vision, 2017 IEEE Conference on Computer Vision and Pattern Recognition, CVPR, Honolulu, HI, USA, pages 5019–5027, July 21-26, 2017 [acceptance rate: 29.9%].

A. Kumar, **M. Jalal**, B. Yan, J. F. Naughton, J. M. Patel: Demonstration of Santoku: Optimizing Machine Learning over Normalized Data. Proceedings of Very Large Data Bases (PVLDB) 8(12): pages 1864–1867, 2015 [acceptance rate: 33.1%].

M. Jalal, Z. Shirmohammadi, A. Patooghy, S. G. Miremadi, Evaluation of Application Mapping for Network-on- Chips, Real-time and Embedded Systems (RTES'10), 6 pages, 2010.

Z. Shirmohammadi, **M. Jalal**, A. Patooghy, S. G. Miremadi, A Reconfigurable Switch Architecture to Enhance Reliability of Network-on-Chips, Real-time and Embedded Systems (RTES'10), 7 pages, 2010.

Honors & Awards

Outstanding reviewer (top 5% student reviewers) for International Conference on Computer Vision (ICCV), August 31, 2021.

Selected to attend Women in Shape Analysis workshop, June 13-18, 2021.

Scholarship recipient to attend AI-DLDA 2020 international summer school on artificial intelligence from deep learning to data analytics, June 29-July3, 2020. [acceptance rate: 11.11%]

Elected volunteer for AAAI 2020 conference, February 2020 (waived registration fee).

Hariri Institute for Computing Graduate Student Fellowship, June 2019. $7500

Women in Computer Vision (WiCV) travel grant for attending CVPR 2019, April 2019 ($1075).

Brilliant BUD Awardee, this distinction enabled me to be a distinguished presenter at the 4th Annual BU Data Science (BUDS) Day poster session and present our research/project during the Student Lightning talk portion of the program. The "Brilliant BUD Award" recognizes outstanding students who have showed dedication to their studies and have shown in-depth knowledge of their research. The recognition comes from a nomination, in my case from Professor Stan Sclaroff.

Selected for an interview for RSIP Women in Computer Vision as part of 100 women in computer vision, April 2018.

Quora **Top Writer 2018**, March 15, 2018.

Travel grant for NAACL 2nd Widening NLP (WiNLP) workshop, June 1, 2018, New Orlean, LA.

SciPy18 **Top Reviewer**, March 3rd, 2018.

Travel grant for Fairness, Accountability, and Transparency (FAT*) conference, February 2, 2018 ($500 as well as waived registration fee).

Full Gold scholarship to ODSC (Open Data Science Conference) East 2018, January 29, 2018.

5-year fellowship for Computer Sciences Ph.D. studies, Boston University, Boston, February 1, 2017.

Chef **diversity scholarship** for attending ChefConf16.

Twitter grant for attending Site Reliability Engineering Conference SREcon16.

Travel scholarship for CRA-W Graduate Cohort Workshop, Spring 2013 and 2016.

Golden Brick honor for unsung but critical tasks in representing WACM, University of Wisconsin-Madison CS department, Madison, WI, May 4, 2016.

Google scholarship for attending Google UBIQUITY: Beyond the Internet of Things, January 2016.

Google Anita Borg Institute (ABI) scholarship for Grace Hopper Celebration (GHC) 2015.

Major League Hacking travel scholarship for mHacks6.

Google travel scholarship for attending VLDB15.

Texas Advanced Computing Center (TACC) scholarship for supercomputing summer institute, 2015.

Full CS departmental funding for attending Grace Hopper Celebration (GHC) 2014.

TACC scholarship for attending IEEE BigData 2014 conference and first hands-on workshop on leveraging high-performance computing resources for managing large datasets.

Apple Inc. scholarship for attending Grace Hopper Celebration (GHC) 2013.

Ranked top %0.3 in Iran University Entrance Examination, 2005.

Selected Course-works

Randomness in Computing (BU CS537), Introduction to Artificial Intelligence (UW CS540), Machine Learning (BU CS542), Deep Learning (BU CS591 K1), Image and Video Computing (BU CS585) , Learning from Data (BU EC 503), Computer Vision (SBU), Statistical Natural Language Processing (BU CS591 W1), Introduction to Optimization for Machine Learning and Computing (BU CS507),

All of Signal Processing (UW ECE632), Data Models and Languages (UW CS784), Introduction to Database Management Systems (UW CS564), Topics in Database Management Systems (UW CS764), Introduction to Human-Computer Interaction (UW CS570), Big Data Systems (UW CS838), Data Analysis with R (UW STAT692), Topics in Applied Math (UW MATH801).

Teaching/Lab Assistant

Women's Accelerator: Fundamentals of Deep Learning for Computer Vision, NVIDIA GPU Technology Conference, Full day on March 17th, 2019, San Jose Convention Center, CA.

Introduction to Computer Science (CS101), Instructor: Perry Donham, Department of Computer Science, Boston University, Spring 2019.

Student coach for the basic track of **Data+Narrative** intensive course at the BU College of Communications, supervised by Professor Maggie Mulvihill, June 1-4, 2018.

Introduction to Database Systems (CS460/660), Instructor: Dr. George Kollios, Department of Computer science, Boston University, Fall 2017. (79 students)

Internet-of-Things lab, supervised by Dr. Raj Veeramani, Thomas Yen, Alfonso gutierrez, Designed tutorials and have worked with Microsoft Band, Pebble Smart Watch, CrazyFlie nanocopter, Parrot AR Drone 2 with Myo armband/Leap Motion, Intel Galileo Gen1 board, Arduino Yun board, Raspberry Pi 2, as well as working with IoT platforms like ThingWorx, IBM Watson, IBM BlueMix, AWS IoT, from May 2015 to May 2016.

Calculus and Analytic Geometry 1 (Math221), Instructor: Dr. Gloria Mari-Beffa and Dr. Ruifang Song, Department of Mathematics, University of Wisconsin-Madison, Fall 2013.

Introduction to Computer Engineering (CS252), Instructor: Dr. Guri Sohi and Dr. Mark Hill, ECE/CS Department, University of Wisconsin-Madison, Spring 2013.

Introduction to Computer Architecture (ECE/CS552), Instructor: Dr. Yu Hen Hu, ECE/CS Department, University of Wisconsin-Madison, Fall 2012.

Advanced Electronic Circuits (ECE342), Instructor: Dr. Giri Vekataramanan, ECE Department, University of Wisconsin-Madison, Fall 2012.

Nephrotex Virtual Internship for Freshman Engineering Students (InterEng101), Supervisor: Dr. Golnaz Arastoopour, University of Wisconsin-Madison, Fall 2012.

Embedded System Design, Instructor: Dr. Alireza Ejlali, Computer Engineering Department, Sharif University of Technology, Spring 2011.

VLSI Design, Instructor: Dr. Mehdi Modarresi, Computer Engineering Department, Sharif

Instructor

Seeing through Engineer's Eyes, 3-week intensive workshop for middle school students, University of Wisconsin-Madison, Madison, WI, Summer 2012.

Network Laboratory, Computer Engineering Department, Sharif University of Technology, Spring 2011.

Digital Design Laboratory (using Verilog HDL and implementing on Altera and Xilinx FPGAs), Computer Engineering Department, Sharif University of Technology, Fall 2010.

Network Laboratory (CCNA-based, Using Packet Tracer), Electrical and Computer Engineering Department, Shahid Beheshti University, Fall 2009.

Professional Services

ICML Women in Machine Learning (WiML) Virtual Un-Workshop Student Volunteer, July 2020.

ICLR 2020 Student Volunteer, May 2020.

Reviewer for CVPR 2022, ICCV2021, EACL SRW 2021, WACV 2021, WiCV ECCV2020, ACL SRW 2020, EMNLP 2020, CVPR 2020, IJCAI-PRICAI 2020, ICML 2020, AAAI 2020, Universal Access

in the Information Society" journal 2019, PLOSone journal 2019, Graph Representation Learning Workshop, NeurIPS 2019, Women in Machine Learning (WiML) NeurIPS 2019, 'Mathematical Problems in Engineering' journal 2019, Women in Computer Vision (WiCV), CVPR 2019, ACL SRW 2019, SciPy 2019, SciPy 2018.

BU Artificial Intelligence Research **Social Chair** and **Publicity Chair**, FY2020-2021.

Founder and President of BU Women Chapter of ACM (ACM-W), FY 2019-2020.

Nominated as Ph.D. Student Representative for Boston University CS Department, FY 2018-2019 and FY 2019-2020.

Workshop Designer, ICA Preconference: Crowdsourcing as a Content Analysis Tool, May 2018.

Mentoring Chair for women in computer science (WACM) in computer sciences department at University of Wisconsin-Madison, September 2015-May 2016.

Activity chair for Women in Computing (WACM) at University of Wisconsin-Madison, September 2013-September 2015.

Social chair for student chapter of ACM (SACM) in computer sciences department of University of Wisconsin-Madison, August 2014-August 2015.

Volunteer mentor for Internet-of-Things MOOC Course–King's College London, led by Professor Mischa Dohler, November 2015-December 2015.

Linux Instructor and volunteer for basic and intermediate levels representing WACM, Department of computer sciences, University of Wisconsin-Madison, Spring and Fall 2016.

Research Talks

Image and Text Analysis of Public Communication, BU AI4ALL Program, July 29, 2021.

3D Human-Object Interaction Reconstruction, BU ARTEMIS Project, July 8, 2021.

Features and Skeletons for Shape Reconstruction, along with Cindy Grimm, Mojgan Saeidi, Sofia Imperatore, Di Meng, Women in Shape Analysis Workshop, June 18 2021

Fall Detection/Prediction, Research Presentation at DawnLight.com, June 2021

2D/3D Pose Estimation in Animals, Humans, and Objects, at Neuro-Autonomy: Neuroscience-Inspired Perception, Navigation, and Spatial Awareness for Autonomous Robots kickoff meeting at Boston University, November 14, 2019.

Hateful Conduct Detection, Twitter.com Exit Research Presentation, August 28, 2019.

Creating Synthetic Datasets using Game Engines for Computer Vision Applications, BU AI4ALL program, July 31, 2019.

From Crowdsourcing to Crowdcoding, along with Lei Guo, Kate K. Mays, and Margrit Betke, A tutorial and research presentation for International Communication Association (ICA) Pre-conference, as part of Crowdsourcing as a content analysis tool: Presentations and a hands-on workshop, May 24, 2018

Automatic Facial Expression Analysis Goes to School, BU Artificial Intelligence Research (AIR) seminar series, February 25, 2018.

Creating Synthetic Data for Deep Learning Applications at Machine Intelligence Conference at MIT Media Lab, November 3, 2018.

Entity-Level Sentiment Analysis of Tweets by Crowdworkers and Google Cloud NLP API, Invited Research Talk at OpenAI, San Francisco, CA, March 12, 2018.

Emotion Recognition, Boston University Artificial Intelligence Winter Retreat, January 11, 2018.

Posters

Student Outcome Prediction on an Intelligent Tutoring System, Boston University Data Science Day (BUDS), February 6, 2019.

Large-scale Synthetic Domain-Randomized 6DoF Object Pose Estimation Dataset, New England Computer Vision Workshop, November 26, 2018.

Large-scale Synthetic Domain Randomized 6DoF Object Pose Estimation Dataset for Deep Learning Applications, OpenAIR Day, October 12, 2018.

Pedestrian Dataset Creation using Video Games, Presented as a poster at American Family Insurance 2nd Annual Analytical Forum, April 18, 2017.

Biological Complexity in Systems Biology of Circadian Clocks, A. Sangari, M. Khabbazian, M. Jalal, M. Arabgol, A. H. Assadi, Presented as a poster at 2011 Midwest Eye Research Symposium.

High-throughput Data Collection and Automated Imaging, A. Sangari, M. Jalal, H. Ardalani, E.S. Selen, H.T. Dashti, M. Mahdavi, A. H. Assadi, Annual Eye Research Institute Vision Science/Visual Art Poster and Gallery Session, October 2011.

Mentorship

Pranav Nambiar and Caroline Banfi, using DeepLabCut for mouse pose estimation, as well as pose annotation and behavior annotation using DeepLabCut and DeepEthogram for rodent FLIR thermal videos, Fall 2020.

Kubra Hatice Eryilmaz, pose estimation and behavior recognition of thermal FLIR videos of rodents using DeepLabCut and DeepEthogram, Fall 2020.

Tanner Park, Tushar Sharma, Annan Miao, and Tabitha Oanda, on Social African Food Analyzing using Computer Vision and Natural Language Processing, Fall 2019.

Weifan Chen, Shukai Fang, Yiwen Gu, on Human Motion Analysis for Physical Therapy Applications, Fall 2019 and Spring 2020.

Kaihong Wang, on Instagram data mining for finding unhealthy food patterns in developing countries using computer vision and natural language toolsets, February-June 2019.

Boqi Chen, on News mining from News URL using newspaper3k API for international news and multimodal image and text feature vector fusion using deep neural networks, November 2018-May 2019.

Wenjun Zhu, on emotion recognition and Twitter data mining using Tweepy, October-December 2018.

Helaine Hall and Varsha Achar to get started on their American Sign Language (ASL) project for AI4ALL summer outreach program at Boston University, June 2018.

Sha Lai, on using crowdsourcing systems (Figure-Eight and Amazon Mechanical Turk) for creating datasets and analyzing data, Spring 2018.

Min Zhou and Sherwin Lee, on body pose estimation using machine learning and deep learning methods, Spring 2018.

Davide Lucci and Silvia Ionescu, on emotion recognition using facial action units and facial landmarks of United States presidential debate using both SVM and CNN, Fall 2017.

Memberships

Mentee for Data Science Mentoring Circle 2021-2022, mentor: Dr. Joe Wang, September 25, 2021.

Boston University Women Chapter of ACM (ACM-W) Student Chapter – President, FY 2019-2020.

Association for the Advancement of Artificial Intelligence (AAAI), Association for Computing Machinery (ACM),Graduate Women in Science and Engineering (GWISE), Association for Computational Linguistics (ACL), Systers, Widening the Natural Language Profession (WiNLP), Women in Machine Learning (WiML), Computer Vision Foundation (CVF), University of Wisconsin-Madison Women in CS (WACM), IEEE

Member of AI Research Initiatives at Boston University (BU AIR), September 2017-May 2022.

Selected Projects

Survey on visual question answering and reasoning, Fall 2018.

Improving real-estate price predictions with images, Fall 2018

Supporting Intel RealSense 3D SR300 camera for Open Augmented Reality Kit (OpenARK) as well as building a test framework for the OpenARK, Summer 2017

Performance tuning in Hive/MR, Hive/Tez, Apache Storm and Apache Spark, Fall 2015

Toyota driving automation natural user interface using Intel RealSense 3D camera, Summer 2015

Scrobbling 2.0: An enhanced prototype for Last.fm Website, Spring 2015.

JPEG image compression, spectral correlation, IIR and FIR filter design with application in ECG, MinMax equalizer, windowing using MATLAB and a survey on image segmentation using spectral clustering, Spring 2014

Survey on community mining in social networks, Fall 2013

Implemented command line interpreter (Shell), memory management module, kernel threads in Linux environment and modified xv6 simulator to support multi-thread, and lottery scheduling, Fall 2013

Survey on creating accelerator for GPU and converting/annotating C benchmarks to CUDA-C, Spring-Summer 2013

DySER porting on Virtex-7, Fall 2012

Exploiting Heterogeneity in Amazon EC2 for Saving Cost, Fall 2012

Design of a fully 5-stage pipelined MIPS processor with 2-way set associative cache using Verilog & synthesized with Design Compiler, Spring 2012

A Survey on near-duplicate video detection methods using YouTube API, Google App Engine, Hadoop, and Condor, Winter 2011

Automatic data acquisition system using a robot arm for arabidopsis photography in study of roots, Fall 2011

Hardware implementation of a fast improved decimal multiplier using VHDL, Summer 2009.

Funded by

Neuro-Autonomy: Neuroscience-Inspired Perception, Navigation, and Spatial Awareness for Autonomous Robots, FY19-20.

BIGDATA: IA: Multiplatform, Multilingual, and Multimodal Tools for Analyzing Public Communication in over 100 Languages, September 2018-Spring 2019.

INT: Collaborative Research: Detecting, Predicting and Remediating Student Affect and Grit Using Computer Vision, Spring 2019-Fall 2019.

Providing Real-time Content with Balanced Political Views, FY18-19.

RI: Small: Using Humans in the Loop to Collect High-quality Annotations from Images and Time-lapse Videos of Cells, Fall 2018.

Skills

Programming Languages: Python 3, Java, R, C, Visual C#.net, Visual C++.

Deep Learning: PyTorch (using frequently), Tensorflow/Keras (using if needed).

Web Development: HTML5, CSS3, Twitter Bootstrap, Joomla! CMS, jQuery.

Operating Systems: OSX, Linux (Ubuntu, Raspbian, CentOS & Redhat) and Microsoft Windows 7, 8.1/10 (Enterprise Edition).

APIs: Google Cloud Natural Language, Google Cloud Vision, Google Visualization, Twitter, Instagram, YouTube.

Computer Vision: OpenPose, OpenFace, OpenCV, Faster-RCNN, Single Shot Detector (SSD), You Only Look Once (YOLO)

Hardware: Verilog, VHDL, CUDA-C, Altera Quartus, XilinX ISE, GPGPU-Sim, CUDA Toolkit, Gem5-GPU, X86 Assembly, Arduino Yun, Raspberry Pi

Also familiar with: Crowdsourcing (Amazon Mechanical Turk/Figure-Eight), MPI, MATLAB, HTCondor, bash scripting, LaTeX, git, Apache Spark, Cloudlab, Wireshark, Docker, AWS-EC2, Scrapy, Gensim, Jupyter, PHP, Tweepy, MongoDB, Postgresql, JavaScript, Node.js, JSON, Shiny package, NLTK, TextBlob, Gensim, Scala, and Scalding.

Certificates

Human Subjects Protection Training: Biomedical Focus, Issued by CITI Program, February 22 2022.

HIPAA for Business Associates, Issued by HIPAA Exams, Inc., January 4 2021.

Fundamentals of Deep Learning for Computer Vision, Issued by NVIDIA Deep Learning Institute, March 17 2019.

Human Subjects Protection Training: Social & Behavioral Focus, Issued by CITI Program, expired.

UW-Madison HIPAA Training Course, Issued by UW Office of Compliance, April 10 2017.

Languages

Farsi, **English**: professional proficiency, **French**: intermediate, **Italian**: basic, **Arabic**: basic.

Hobbies

Endurance road cycling, Sailing, Swimming, Kayaking, XC Skiing, Cooking, Video creation, Watercolor painting, Portrait drawing, Organizing events, Video games.