Mohammad Hossein Mohammadi

Curriculum Vitae

INTERESTS

- Artificial Intelligence, Machine Learning
- Optimization Algorithm, Neural & NeuroFuzzy Network
- Computer Vision, Signal and Image Processing

EDUCATION

- 2015–2020 **BSc in Computer Engineering (Information Technology)**, Department of Computer Engineering, Islamic Azad University, Najafabad Branch, Najafabad, Iran.
 - o Cumulative GPA 2.84/4 (14.89/20)
 - o Last 2 years' GPA 3.12/4 (15.54/20)
 - o Thesis Title: Semantic segmentation of breast cancer pathology images using the U-Net model
 - Supervisor : Dr.Mehdi Jabalameli
- 2011–2015 Diploma in Mathematics and Physics, Sheikh Ansari High School, Isfahan, Iran..
 - o GPA 18.53/20

PATENTS

- [P1] S.Y.Moradi, M.H.Mohammadi, S.Yaser.Moradi " The system for early detection of Wilson disease in the neonates ", *Provisional Patent*.
- [P2] S.Y.Moradi, M.H.Mohammadi, "The system for early detection of Heterochromia disease in the neonates", *ir* 139850140003011312 .*Iran Patent*.
- [P3] S.Y.Moradi, M.H.Mohammadi, P.Mohammadi "Pocket Protector Of Sensitive Injective And Inhalant Vials Against Temperature And Impact Changes ", ir 139850140003011419 .Iran Patent.
- [P4] S.Y.Moradi, M.H.Mohammadi, A.Anvari "Energy Waste Reduction System based on prediction of people's presence and working time in industries and medical centers", ir 139850140003011094 .Iran Patent.
- [P5] S.Y.Moradi, S.Z.Moradi, M.H.Mohammadi " Coupling device temperature to body temperature for ambulances and hospitals sera ", *ir* 139550140003013173 .Iran Patent.

PUBLICATIONS

- [B1] M.H.Mohammadi, A.Karimi, S.Y.Moradi." A Step-By-Step Guide to Patenting in Iran ". Tehran,Iran.978-600-356-922-8.Arna.2020.Publication Medium.(Amazon Link)
- [B2] M.H.Mohammadi, S.Y.Moradi. "TensorFlow Tutorial". Tehran, Iran. 978-622-291-016-7. Arna. March. 2021. Publication Medium.
- [B3] M.H.Mohammadi, S.Y.Moradi, M.Mohammadi." *Artificial intelligence Tutorial* ". Tehran,Iran.978-622-291-049-5.Arna.March,2021.Publication Medium.

- [B4] M.H.Mohammadi, S.Y.Moradi, M.Siampour." *CEH(Certified Ethical Hacker)* ". Tehran,Iran.978-622-291-040-2.Arna.March,2021.Publication Medium.
- [B5] S.Y.Moradi, M.H.Mohammadi. "Basics of Internet of Things (IoT)". Tehran, Iran. 978-622-2910-14-3. Arna. March, 2021. Publication Medium.
- [B6] S.Y.Moradi, M.H.Mohammadi." Arduino Tutorial ". Tehran, Iran. 978-622-2910-15-0. Arna. March, 2021. Publication Medium.
- [B7] A.Salehi, S.Y.Moradi, M.H.Mohammadi, M.Radaei. "Principles Of Image Compression in The Medical and Aerial Image By MATLAB Software". Tehran, Iran. 978-622-291-001-3. Arna. 2021. Publication Medium.
- [J1] S.Y.Moradi, M.Akbari Moghaddam, M.H.Mohammadi, "Computer Modeling of Information Transmission Principles and Methods in Telemedicine Networks", *Journal of Rafsanjan University of Medical Sciences (JRUMS)*, 2018.
- [C1] S.Y.Moradi, M.Akbari Moghaddam, M.H.Mohammadi, "Telemedicine Methods; Basics, Design, and Optimization", 3rd International conference on Modern Approaches in Science, Technology and Engineering, 2018

HONORS & AWARDS

- Sep 2019 **2nd Team Rank**, 7th Mobile Programming Marathon along with the "Chelesme" team members, 85 teams participated from Iran, *Sharif University of Technology, Tehran, Iran*.
- Sep 2017 **3rd Team Rank**, 4th Mobile Programming Marathon along with the "Yakhmak" team members, 90 teams participated from Iran, *Sharif University of Technology, Tehran, Iran*.
- Jun 2015 **Top 2 %**, Nationwide entrance exam of Iranian Universities, very competitive with nearly 250,000 participants.

RESEARCH & VOLUNTEER WORK

- 2018–2019 **Isfahan University Machine Learning Laboratory**, *Isfahan, Iran.* **Topics**: Computer Vision, Signal and Image Processing
- Oct 2016 International Conference on Computer Science and Engineering, Faculty of Com-Apr 2017 puter Engineering Islamic Azad University, Najafabad Branch, Isfahan, Iran.
 - Jul 2017 **Open Source Softwares Conference & Ubuntu 17.04 Release Party**, Speaker: "How to Prevent DOS & DDOS Attacks on Linux Servers, University of Isfahan, Isfahan, Iran.
- Nov 2017 International Federation of Red Cross and Red Crescent Societies IFRC, Isfahan Mar 2020 & Kermanshah, Iran. (Rescue Team).

WORK EXPERIENCE

- May 2020 Freelance Designer, UpWork, Mountain View, CA.
- Jan 2018 Researcher and Patentable, Iran Patent Center (Kanoon IPC), Tehran, Iran.
- May 2016 Internship & Work Android Developer, ITBarbod Company, Isfahan, Iran .
- May 2016 Internship Android Developer, UI & UX Design, Aron Company, Isfahan, Iran.

SELECTED PROJECTS

- Oct 2017 Reverse Engineering Video Borescope Device: S.Y.Moradi, M.H.Mohammadi, Iran.
- May 2021 Fully-Convolutional Siamese Networks for Object Tracking using YOLO deep learning
- May 2021 Emotion Recognition using Convolutional Neural Network (Keras, Pandas, Numpy, Sklearn)

- July 2021 Object Recognition using Recurrent Neural Network (Keras, Numpy, Pandas, Scikit-Image, Matplotlib, Scikit-Learn, MTCCNN)
- Oct 2021 Facial recognition using Multi-Task Convoluted Neural Networks and VGG (Keras, Numpy, Pandas, Scikit-Image, Matplotlib, Scikit-Learn)
- Nov 2021 Automatic number-plate recognition with Deeplearning using pytorch
- Aug 2020 Using Machine Learning Techniques for Accurate and Early Identification of Asthma and its Affecting Factors
- Jul 2019 Development of car license plate recognition software
- Nov 2019 Remote Temperature Monitoring and Controlling Via Sending Text Messages (Intelligent Thermostat)
- Nov 2019 Intelligence and control of home appliances by the microcontroller
- Jul 2018 Development of face recognition software using the Viola-Jones algorithm

SKILLS

Technical JAVA, MATLAB, Python, R, C,C++ | OpenCV, Tensorflow, Keras, PyTorch, Scikit-Learn, Skills Pandas | SQL, XML, HTML, CSS, Wordpress | Ubuntu Linux, Kali Linux, Microsoft Windows Server, Microsoft Windows

Tools and Wireshark, SAMtools, MetaVelvet, BLAST - NCBI, MetaPIAn, SPSS | Android Studio, Softwares RStudio, Pycharm, Eclipse, MS Visual Studio, Intellij, Git, Inventor, Sentry MBA | Adobe XD, Adobe Photoshop, Adobe InDesign

LANGUAGES

Persian Mother Tongue

English Moderate

REFERENCES

o Dr. Behrang Barekatain, Assistant Professor

Department of Computer Engineering, *Islamic Azad University, Najafabad Branch* Post Doctoral from Ryerson University, Ontario, Canada

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Dr. Akbar Nabiollahi, Assistant Professor

Department of Computer Engineering, *Islamic Azad University, Najafabad Branch* Phd from University of Technology Malaysia, Johor, Malaysia

Email: a.nabi@pco.iaun.ac.ir

o Dr. Mehdi Jabalameli, Assistant Professor

Department of Computer Engineering, *Islamic Azad University, Najafabad Branch* Phd from University of Isfahan, Isfahan, Iran

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