Mehrdad Mohammadian

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Education

B.Sc in Computer Engineering at Azad University, Mashhad Branch ⬈   Sep 2018 - July 2022, Mashhad-Iran
- **CGPA:** 17.53/20 (3.5/4)   **Last two years GPA:** 4/4
- **Thesis Grade:** 20/20 (4/4)   **Supervisor:** Dr. Shabnam Shadroo
- **Thesis:** Anxiety prediction using deep learning GitHub Web App
- **Related courses:** Computer Vision (20/20) GitHub, Artificial Intelligence and Expert Systems (19.5/20), Computational Intelligence (20/20), Languages and Speech Processing (20/20), Information Retrieval and Web Searching (20/20) GitHub, Software Engineering (20/20), Algorithms Design (18/20) more

Research Interests

- Computer Vision
- CNNs, GANs, RNNs
- Deep/Machine Learning
- Natural Language Processing
- AI in healthcare
- Data Science

Research Experience

Research Assistant Training Student at Linnaeus University ⬈   Oct 2021 - July 2022, Kalmar-Sweden (remote)
- **Research:** solving Persian font recognition problem using CNNs.
- **Tools:** Python, TensorFlow, GNU/Linux, Google Colab, Git
- **Supervisor:** Dr. Neda Maleki ⬈
- M. Mohammadian, N. Maleki, T. Ohlsson, F. Ahlgren, "Persis: A Persian Font Recognition Pipeline Using Convolutional Neural Networks", 2022 12th International Conference on Computer Engineering and Knowledge (ICCKE) (Under review) ICCKE abstract

Teaching Experience

Instructor at Scientific Association of Azad University   Sep 2021 - July 2022, Mashhad-Iran
- Instructed the following workshops and webinars in the scientific association of the computer engineering department:
- An Introduction to open-source and GitHub slides video
- How to build a website with GitHub Pages (Git, Jekyll, Hugo) slides
- An introduction to using cloud services for ML/DL projects slides video
- Tips & guides for new students of the computer engineering department slides video

Technical Skills

- **Machine Learning:** TensorFlow/Keras, Scikit-Learn, RapidMiner, NumPy, Pandas, Matplotlib
- **Programming Languages:** Skilled in Python3. Familiar with: MATLAB, C++, Golang, SQL, HTML, CSS
- **Development Tools:** Git, FastAPI, Docker, Streamlit, Jupyter Notebook
- **Other Tools:** OpenCV, GNU/Linux, Windows, LaTeX, Overleaf, PhotoShop, Figma

Selected Projects

- Hair coloring application by using CNNs (image segmentation) GitHub Web App
- Parkinson's disease detection by using few-shot learning GitHub
- Search between the detected objects of an image by using deep learning GitHub Web App
- Portrait painting recommendation system by using deep learning GitHub Web App
- Jami - A cross platform GUI for play musical instruments (Golang) GitHub

Work Experiences

Deep Learning Researcher at Shenasa.ai ⬈   Mar 2022 - Now, Tehran-Iran (remote)
- **Research:** Keyword extraction methods and develop a web service for exploring documents by keywords.
- **Research:** Face anti-spoofing methods to build an authentication system.
- **Tools:** Python, FastAPI, GNU/Linux, MySQL, Git

Computer Vision Intern at Veerasense ⬈ Aug 2021 - Sep 2021, Mashhad-Iran
- Investigated and examined CNN architectures such as YOLO, SSD, and CenterNet.
- Published a fixed version of the CenterNet model for running on Google Colab GPUs and ran some experiments with different backbones on custom datasets. ⓞ GitHub

Back-End Developer at Profile.ir ⬈ Apr 2019 - Mar 2020, Mashhad-Iran
- Developed and maintained back-end infrastructure services using micro-service architecture.
- **Developed Services:** search, recommendation, and user profile.
- **Tools:** Golang, Python, Mongo db, Elastic Search db, Web scraping, GNU/Linux, Git

Online Courses

- **Generative Adversarial Networks** ⬈ Diginext Academy, certificate Jun 2022
- **Deep Learning and Computer Vision** ⬈ DigiNext Academy, certificate ⓞ GitHub Mar 2022
- **Machine Learning in Python with Scikit-Learn** ⬈ france université numériqu, certificate Jul 2021
- **Machine Learning** ⬈ Coursera, certificate Oct 2020
- **AI Fundamentals with Python** ⬈ Datacamp, certificate May 2020

Honors and Awards

- **Ranked in the top 10%** among 2018 entrance students in B.Sc of computer engineering. ⬈ link
- **Ranked in the top 5%** among Iranian GitHub users. ⬈ link
- Awarded for solving the **Harvard Puzzle Day** event three times. ⬈ Apr 2022 ⬈ Sep 2020 ⬈ Apr 2020
- **Awarded first place** in the Rokad entrepreneurship event and **received a gold coin** as a reward. Presented the idea of an e-learning system specially for high school students called "Class Plus" ⬈ certificate

Extracurricular Activities

Main Member of the Scientific Association (CSAIAUM) at Azad University Sep 2021 - August 2022
- Instructed and organized workshops/webinars, managed GitHub and social media, collaborated to create content ⬈ certificate

Translation of Machine Learning Course by Andrew Ng at GitHub Sep 2020 - Dec 2020
- Published notes and translated contents while completing this course. Until this moment, **12K unique users with 26K sessions** visited the website, and the average duration for reading the contents is **5min 37sec**. ⬈ website ⓞ GitHub

Languages

- **Persian:** Native
- **English:** IELTS (will be taken soon)

References

Dr. Mehrdad Jalali
📍 Karlsruhe, Germany
Associate Professor and Scientist at Karlsruhe Institute of Technology (KIT)
Editor of Materials Todays Communication Journal (Elsevier)
Associate Professor at Azad University
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