

Javad Sheikh

🌐 Personal Website
☎ +98-919-7317-364

✉ javad2n@aut.ac.ir
🆔 0000-0001-6474-1674

🌐 linkedin.com/in/javad-sheikh
🐙 github.com/javad-sheikh

EDUCATION

Amirkabir University of Technology

Tehran, Iran

M.Sc. in Computer Engineering, Minor in Artificial Intelligence and robotics

Sep. 2018 – Now

- **GPA:** 15.77/20

Amirkabir University of Technology

Tehran, Iran

B.Sc. in Biomedical Engineering, Minor in Bioelectronics

Sep. 2013 – Sep. 2018

- **GPA:** 14.78/20

Shahid Beheshti Highschool

Gorgan, Iran

Diploma in Mathematics and Physics Discipline

Sep. 2009 – Sep. 2013

- Under the supervision of NODET (National Organization for Developing Exceptional Talents)

PUBLICATIONS

- **Book chapter:**

Shariatzadeh F.J., Salar Amoli M., Faghihi F., **Sheikh J.**, Sadeghi P., et al.; 2021; *Sutures and surgical instruments*; Medical Equipment;

- Sheikh V., RezaeiMoghaddam H., Jafary R., Gholami Z., **Sheikh J.**; 2020; *Design, construction and performance evaluation of an automatic weighing lysimeter.*; Water and Irrigation Management; 10(1); pp.61-73.

DOI: dx.doi.org/10.22059/jwim.2020.294404.738

- Nazarimehr F., **Sheikh J.**, Ahmadi M.M., Pham V.T., Jafari S.; 2018; *Fuzzy predictive controller for chaotic flows based on continuous signals.*; Chaos, Solitons & Fractals; 106; pp.349-354.

DOI: doi.org/10.1016/j.chaos.2017.12.005

WORKING EXPERIENCE

freelance AI engineer

Apr. 2019 – Present

Retinopathy detection App Development

- Preprocessed retina images from Kaggle Diabetic Retinopathy data set
- retrained DenseNet-169 on a processed data set
- Developed AI mobile application to detect diabetic retinopathy

Time series forecasting

- Deployed different forecasting methods like Arima, Sarima, and recurrent neural networks

Artificial Intelligence App Developer

Sep. 2018 – Mar. 2019

AI engineer at Sibbank

Tehran

- Researched and assessed different mobile compatible deep learning structures
- Used transfer learning to retrain Mobilenet-192
- Developed AI mobile application to read credit card number and expiration from images taken with mobile camera

PROJECTS

Tracking moving object in video | *Python, OpenCV*

- Extracting key points using Brief, Freak, Surf, and Sift
- Following key points utilizing RANSAC and Least Median

Generative adversarial network | *Python, Tensorflow, Google Colab, Gradient Tape*

- Generation cat and dog pictures with GAN network using the cats and dogs data set

Semantic Segmentation | *Python, Tensorflow, Google Colab, CNN*

- Semantic segmentation of KITTI data set using convolutional neural networks

Machine Translation | *Python, Tensorflow, LSTM, GRU, Attention*

- Designed an Encoder-Decoder Recurrent Neural Network model with attention for Deutsch to English translation

fuzzy neural network | *Python*

- Estimation of Mackey-Glass time series with a fuzzy neural network

Machine learning Projects | *Python, scikit-learn*

- Clustering tasks using Kmeans, DB-Scan and Hierarchical clustering
- Classification with KNN with k found using K—fold-cross-validation
- Classification with C4.5, CART, ID3 Decision Trees
- Classification with Random Forest
- Classification of car evaluation data set with Naive Bayes and Logistic Regression
- Classification of handwritten digits data set with SVM

Parameter Estimation | *Matlab, Optimization*

- Parameter Estimation of the Rulkov Neuron Map using Interior search algorithm)

TEACHING EXPERIENCE

Software Tutor | *Python, Tensorflow, Google Colab*

Spring 2019

- Department of Computer Engineering, Amirkabir University of Technology

Software Tutor | *MATLAB, Simulink*

Spring 2015

- Department of Biomedical Engineering, Amirkabir University of Technology

LANGUAGES

English (CEFR level: C1)

Listening: 8.5, Reading: 8.5, Writing: 6.5, Speaking: 7

Persian (Native)

TECHNICAL SKILLS

Languages: Python, Java, Matlab, T_EX, C/C++, SQL, JavaScript, HTML/CSS

Developer Tools: Git, VS Code, Visual Studio, Android Studio, Jupyter Notebook, Google Colab

Libraries: Tensorflow, Tensorboard, Tensorflow-Lite, Stable-Baselines, OpenCV, Keras, pandas, NumPy, Matplotlib, scikit-learn

REFERENCES

Prof. Safabakhsh, Department of Computer Engineering, Amirkabir University of Technology

Email: safa@aut.ac.ir

Asst. Prof. Nazerfard, Department of Computer Engineering, Amirkabir University of Technology

Email: nazerfard@aut.ac.ir

Assoc. Prof. Jafari, Department of Biomedical Engineering, Amirkabir University of Technology

Email: sajadjafari@aut.ac.ir