# **SEYED AMIR KASAEI**

in amir-kasaei

☑ a.kasaei@me.com

**?** amirkasaei

amirkasaei.github.io

#### **EDUCATION**

Bachelor of Science, Computer Engineering

University of Guilan

GPA:3.98/4 (Grade: 19.58) - Ranked 1st

(Sep 2019 – Aug 2023)

#### **HONORS & AWARDS**

• Ranked 1st among B.Sc. Computer Engineering Students (Certificate in Persian) Sep 2019 – Aug 2023

• M.Sc of Software Engineering Admission at Sharif University of Technology as an Exceptional Talented Student

Sep 2023

• Tuition Waiver, Bachelor of Science, University of Guilan

Sep 2019 - Aug 2023

#### RESEARCH INTERESTS

Machine Learning, Deep Learning, Data Mining, Computer Vision, Bioinformatics, Medical Image Processing, Natural Language Processing, Meta-Learning

### **RESEARCH PAPERS**

 MAML on Human Sperm Abnormality Detection (in progress) Seyed Amir Kasaei, Amir Mohammad Ezzati, Amin Mokaddar Daemdoost, Seyed Abolghasem Mirroshandel.

## **EXPERIENCES**

• IT Support Technician

Guilan Soha Seir Sep 2019 - Present

Teaching Assistant of Digital Circuits

Univeristy of Guilan Sep 2022 - Jan 2023

Instructor: Dr. Mahhdi Aminian

Teaching Assistant of Artificial Intelligence

Univeristy of Guilan Sep 2022 - Jan 2023

Instructor: Dr. Yasaman Boreshban

Teaching Assistant of Microelectronic Circuits

Univeristy of Guilan Feb 2023 - Jun 2023

Instructor: Dr. Mahhdi Aminian

## **SELECTED ACCOMPLISHED PROJECTS - (Other Projects on Github)**

- MAML on Human Sperm Abnormality Detection Github repository
  - We used MAML model to detected human sperm abnormality on its head, vacoule, acrosome, and tail.
  - In this project we used Learn2learn, Scikit-learn, PyTorch, Numpy, Matplotlib, seaborn.
- Image Segementation on CamVid using SegNet Github repository
  - We implemented SegNet model to partition input images into 32-class regions.
  - In this project we used Pandas, Scikit-learn, Keras, Tensorflow, Numpy, Matplotlib.
- Multi-Class Weather Classification Github repository
  - We implemented Simple CNN, Resnet And Inception Net for image classification.
  - In this project we used Pandas, Scikit-learn, Keras, Tensorflow, Numpy, Matplotlib.
- Arabic Broken Plurals Github repository
  - We implemented a character based Machine Translation Model model to predict plural form of arabic
  - In this project we used **BERT Embedding**, **Pandas**, **Scikit-learn**, **Keras**, **Tensorflow**, **Numpy**.

- An Odd Music Generator Github repository
  - We implemented a Denoising Auto Encoder model to denois the input song, a Deep Neural Network to Recognize notes in the input song and a Language model to predict the next note of the song.
  - In this project we used Scikit-learn, Keras, Tensorflow, Numpy, Librosa, Matplotlib.
- Multi-Lable Text Classification Github repository
  - We implemented a multi task language model to predict class type of subjects and also the sentimental analysis of sentences.
  - In this project we used **Pandas, Scikit-learn, Keras, Tensorflow, Numpy, Hazm, NLTK, Matplotlib**.

#### **NOTABLE COURSES**

- Fundamental of Data Mining 20 / 20
- Special Topics 1 (Deep Learning) 19.8 / 20
- Special Topics 2 (Introduction to Machine Learning) - 18.16 / 20
- Fundamental of Speech and Natural Language
   Processing 20 / 20
- Artificial Intelligence and Expert Systems 20
   / 20
- Principles of Database Design 20 / 20
- Data Structures 20 / 20

- Software Testing 20 / 20
- Algorithm Design 20 / 20
- Fundamentals of Compiler Design 20 / 20
- The Theory of Formal Languages and Automata 19.75 / 20
- Engineering Statistics and Probability 20 / 20
- Signal and Systems 19.5 / 20
- Engineering Mathematics 19.75 / 20
- Differential Equations 18.75 / 20
- Discrete Mathematics 19.75 / 20

## **LICENSES & CERTIFICATIONS**

Deep Learning Specialization

DeepLearning.AI Instructor: Andrew Ng Aug 2022 Credential

Machine Learning Specialization

DeepLearning.AI Instructor: Andrew Ng Sep 2022 Credential Fundamentals of Reinforcement Learning

University of Alberta Instructor: Martha and Adam White Aug 2022 Credential

Crash Course on Python

Google Aug 2022 Credential

## **SKILLS**

- Programming Language: Python, Java, C++, VHDL
- Data Visualization : Matplotlib, Numpy, Panadas, Seaborn
- Web development: HTML, CSS, Bootstrap, jQuery, PHP, MySQL
- Machine Learning & Deep Learning: Scikit-learn, Keras, Tensorflow, Pytorch, Learn2learn, MAML
- Computer Vision: CNN, Image Segmentation, Image Classification, Image Processing
- Natural language processing: NLTK, hazm, Stemmer, Lemmatizer, Tokenizer, RNN,GRU, LSTM, BERT
- Collaboration and Communication Tools: Slack, GitHub, Skype

# **REFERENCES**

Dr. Seyed Abolghasem Mirroshandel University of Guilan mirroshandel@guilan.ac.ir Google Scholar Associate Professor of Computer Engineering, University of Guilan, Rasht, Iran Dr. Mahdi Aminian University of Guilan mahdi.aminian@guilan.ac.ir Google Scholar Assistant Professor of Computer Engineering, University of Guilan, Rasht, Iran University of Guilan Dr. Yasaman Boreshban Google Scholar yasaman.boreshban@sharif.edu Lecturer, Sharif University of Technology, University of Guilan Dr. Aida Khozaee University of Guilan a.khozaee@ut.ac.ir Google Scholar

Lecturer, University of Guilan