

SEYED AMIR KASAEI

in amir-kasaei
✉ a.kasaei@me.com
👤 amirkasaei
🌐 amirkasaei.github.io

EDUCATION

- **Bachelor of Science, Computer (Software) Engineering** (Sep 2019 – Aug 2023)
University of Guilan
GPA:3.98/4 (Grade: 19.58) - **Ranked 1st**

HONORS & AWARDS

- **Ranked 1st** among B.Sc. Computer Engineering Students ([Certificate in Persian](#)) Sep 2019 – Aug 2023
- Honored as **Exceptional Talented Student** ([Certificate in Persian](#)) Aug 2023
- **Tuition Waiver**, Bachelor of Science, University of Guilan Sep 2019 – Aug 2023

RESEARCH INTERESTS

Machine Learning, Deep Learning, Computer Vision, Mechine Learning Safety, Medical Image Analysis, Natural Language Processing

RESEARCH PAPERS

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

EXPERIENCES

- **Reasearch Assistant**
Univeristy of Guilan
Sep 2022 - Aug 2023
Supervisor: Dr. S A Mirroshandel
Machine Learning
- **Teaching Assistant of Artificial Intelligence**
Univeristy of Guilan
Sep 2022 - Jan 2023
Instructor: Dr. Yasaman Boreshban
- **Teaching Assistant of Digital Circuits**
Univeristy of Guilan
Sep 2022 - Jan 2023
Instructor: Dr. Mahhdi Aminian
- **Teaching Assistant of Microelectronic Circuits**
Univeristy of Guilan
Feb 2023 - Jun 2023
Instructor: Dr. Mahhdi Aminian

SELECTED ACCOMPLISHED PROJECTS - (Other Projects on Github)

- **CT-scan Image Segmentation using 3D-UNet** - [Github repository](#)
 - 3D-UNet model is implemented to segment liver in CT-scan images and compared to 2D-UNet
 - Scikit-learn, Torch, Numpy, Matplotlib, OpenCV
- **Breast Tumor Classification using GNN** - [Github repository](#)
 - GNN model is implemented to classify Breast Tumor on BRACS dataset
 - Histocartography, DGL, Torch Geometric, Torchvision, Scikit-learn, Torch, Numpy, Matplotlib, OpenCV, Pandas
- **Arabic Broken Plurals** - [Github repository](#)
 - We implemented a character based Machine Translation Model model to predict plural form of arabic words
 - BERT Embedding, Pandas, Scikit-learn, Keras, Tensorflow, Numpy
 - This project was done as a partnership with Dr. SA Mirroshandel for **Stony Brook University**
- **Image Segementation on CamVid using SegNet** - [Github repository](#)
 - SegNet model is implemented to segment images on CamVid dataset
 - Pandas, Scikit-learn, Keras, Tensorflow, Numpy, Matplotlib
- **Multi-Class Weather Classification** - [Github repository](#)
 - Simple CNN, Resnet And Inception Net are all implemented an d compared for image classification
 - Pandas, Scikit-learn, Keras, Tensorflow, Numpy, Matplotlib

- **An Odd Music Generator** - [Github repository](#)
 - We implemented a Denoising Auto Encoder model to denoise 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.
 - Scikit-learn, Keras, Tensorflow, Numpy, Librosa, Matplotlib
- **Multi-Label Text Classification** - [Github repository](#)
 - We implemented a multi task language model to predict class type of subjects and also the sentimental analysis of sentences.
 - 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
- **Fundamentals of Language and Speech 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
- **Principles of Compiler Design** - 20 / 20
- **The Theory of 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, Panadas, Seaborn, OpenCV, Wandb
- **Machine Learning & Deep Learning** : Scikit-learn, Keras, Tensorflow, Pytorch, Learn2learn, Numpy
- **Computer Vision** : CNN, Image Segmentation, Image Classification, Image Processing
- **Natural language processing** : NLTK, hazm, BERT
- **Collaboration and Communication Tools** : Slack, GitHub, Skype, Discord
- **Web development** : HTML, CSS, Bootstrap, jQuery, PHP, MySQL

REFERENCES

Dr. Seyed Abolghasem Mirroshandel
mirroshandel@guilan.ac.ir
 Associate Professor of Computer Engineering, University of Guilan, Rasht, Iran

University of Guilan
[Google Scholar](#)

Dr. Mahdi Aminian
mahdi.aminian@guilan.ac.ir
 Assistant Professor of Computer Engineering, University of Guilan, Rasht, Iran

University of Guilan
[Google Scholar](#)

Dr. Yasaman Boreshban
yasaman.boreshban@sharif.edu
 Lecturer, Sharif University of Technology, University of Guilan

University of Guilan
[Google Scholar](#)